THE COUNTY GOVERNMENT OF TRANS NZOIA
Department of Youth Sports and Talent Development
P.O. Box 4211-30200
KITALE

TENDER DOCUMENTS FOR PROCUREMENT OF WORKS ROADS, WATER, BRIDGE ETC)

NAME AND CONTACTADDRESSES OF PROCURING ENTITY

Name: County Government of Trans Nzoia
Address: P.O Box 4211 – 30200 Kitale
Email address: info@transnzoia.go.ke

Invitation to Tender (ITT) No.: **CGTN/ YSTD/T001/2026-2027**

THE PROPOSED REHABILITATION AND MODERNIZATION OF KENYATTA STADIUM - PHASE 1A COMPLETION

Issued on: 29.10.2026, Close Date: 10.11.2026, at 11.00am

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INVITATION TO TENDER

PROCURING ENTITY: **COUNTY GOVERNMENT OF TRANS NZOIA**

CONTRACT NAME AND DESCRIPTION: THE PROPOSED REHABILITATION AND MODERNIZATION OF KENYATTA STADIUM - PHASE 1A COMPLETION

1. The County Government of Trans Nzoia Invites sealed tenders for the construction of the proposed rehabilitation and modernization of Kenyatta Stadium – Phase 1A completion.

2. Tendering will be conducted under open competitive method National using a standardized tender document. Tendering is open to all qualified and interested Tenderers.

3. Qualified and interested tenderers may obtain further information and inspect the Tender Documents during office hours at the address given below.

4. A complete set of tender documents may be may be obtained electronically from the Website(s) www.transnzoia.go.ke and also www.tenders.go.ke FREE OF CHARGE. All applicants who download tender documents MUST submit accurate details and contacts for registration through the following email: supplychain.transnzoia@gmail.com, to facilitate in relevant communication during the tendering period.

5. Tender documents may be viewed and downloaded for free from the website: www.transnzoia.go.ke and www.tenders.go.ke. Tenderers who download the tender document must forward their particulars immediately to supplychain.transnzoia@gmail.com or procurement@transnzoia.go.ke, to facilitate any further clarification or addendum.

6. Tenders shall be quoted be in Kenya Shillings and shall include all taxes. Tenders shall remain valid for 182 days from the date of opening of tenders.

7. All Tenders must be accompanied by a tender Security of Kes.6,000,000/= (Kenya shillings six million only).

8. A mandatory pretender site visit shall take place on Tuesday, 3rd November, 2026, starting 9.00am, at Kenyatta Stadium (located in the Veterinary area of Kitale) approximately 1 kilometer from Kitale CBD. The site can be accessed via Kitale Suam Road or Laini Moja Road.

9. The Tenderer shall chronologically serialize all pages of the tender documents submitted.

10. Completed tenders must be delivered to the address below on or before **11.00am, Tuesday, 10 November, 2026.** Electronic Tenders will not be permitted.

11. Tenders will be opened immediately after the deadline date and time specified above or any dead line date and time specified later. Tenders will be publicly opened in the presence of the Tenderers' designated representatives who choose to attend at the address below.

12. Late tenders will be rejected.

13. The addresses referred to above are:

A. Address for obtaining further information and for purchasing tender documents

County Government of Trans Nzoia,
County Supply Chain Management Services, County Headquarters next to Kitale Police Station
P.O Box 4211 – 30200, Kitale
Head Procurement Function, supplychain.transnzoia@gmail.com

B. *Address for Submission of Tenders.*

County Government of Trans Nzoia
P.O Box 4211 – 30200, Kitale (Attention: Head of Procurement Function).
County Supply Chain Management Services, County Headquarters next to Kitale Police Station

C. *Address for Opening of Tenders.*

County Government of Trans Nzoia
P.O Box 4211 – 30200, Kitale (Attention: Head of Procurement Function).
County Supply Chain Management Services, County Headquarters next to Kitale Police Station

CHIEF OFFICER – YOUTH SPORTS AND TALENT DEVELOPMENT

Signature: _____ *Date:* _____

PART1: TENDERING PROCEDURES

SECTION I - INSTRUCTIONS TO TENDERERS

A GENERAL PROVISIONS

1.0 Scope of tender

1.1 The Procuring Entity as defined in the Appendix to Conditions of Contract invites tenders for Works Contract as described in the tender documents. The name, identification, and number of lots (contracts) of this Tender Document are specified in the TDS.

1.2 Throughout this tendering document:

a) The term "inwriting" means communicated in written form (e.g. by mail, e-mail, fax, including if specified in the TDS, distributed or received through the electronic-procurement system used by the Procuring Entity) with proof of receipt;

b) if the context so requires, "singular" means "plural" and vice versa;

c) "Day" means calendar day, unless otherwise specified as "Business Day". A Business Day is any day that is an official working day of the Procuring Entity. It excludes official public holidays.

2.0 Fraud and corruption

2.1 The Procuring Entity requires compliance with the provisions of the Public Procurement and Asset Disposal Act, 2015, Section 62 "Declaration not to engage in corruption". The tender submitted by a person shall include a declaration that the person shall not engage in any corrupt or fraudulent practice and a declaration that the person or his or her sub-contractors are not debarred from participating in public procurement proceedings.

2.2 The Procuring Entity requires compliance with the provisions of the Competition Act 2010, regarding collusive practices in contracting. Any tenderer found to have engaged in collusive conduct shall be disqualified and criminal and/or civil sanctions may be imposed. To this effect, Tenders shall be required to complete and sign the "Certificate of Independent Tender Determination" annexed to the Form of Tender.

2.3 Tenderers shall permit and shall cause their agents (whether declared or not), subcontractors, sub-consultants, service providers, suppliers, and their personnel, to permit the Procuring Entity to inspect all accounts, records and other documents relating to any initial selection process, pre-qualification process, tender submission, proposal submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Procuring Entity.

2.4 Unfair Competitive Advantage - Fairness and transparency in the tender process require that the firms or their Affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to this tender. To that end, the Procuring Entity shall indicate in the Data Sheet and make available to all the firms together with this tender document all in formation that would in that respect give such firm any unfair competitive advantage over competing firms.

3.0 Eligible tenderers

3.1 A Tenderer may be a firm that is a private entity, a state-owned enterprise or institution subject to ITT 3.8, or an individual or any combination of such entities in the form of a joint venture (JV) under an existing agree mentor with the intent to enter in to such an agreement supported by a letter of

intent. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the tendering process and, in the event the JV is awarded the Contract, during contract execution. Members of a joint venture may not also make an individual tender, be a subcontractor in a separate tender or be part of another joint venture for the purposes of the same Tender. The maximum number of JV members shall be specified in the TDS.

3.2 Public Officers of the Procuring Entity, their Spouses, Child, Parent, Brothers or Sister. Child, Parent, Brother or Sister of a Spouse, their business associates or agents and firms/organizations in which they have a substantial or controlling interest shall not be eligible to tender or be awarded a contract. Public Officers are also not allowed to participate in any procurement proceedings.

3.3 A Tenderer shall not have a conflict of interest. Any tenderer found to have a conflict of interest shall be disqualified. A tenderer may be considered to have a conflict of interest for the purpose of this tendering process, if the tenderer:

a) Directly or indirectly controls, is controlled by or is under common control with an other tenderer;

b) Receives or has received any director indirect subsidy from another tenderer;

c) Has the same legal representative as an other tenderer;

d) Has a relationship with an other tenderer, directly or through common third parties, that puts it in a position to influence the tender of an other tenderer, or influence the decisions of the Procuring Entity regarding this tendering process;

e) Any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the goods or works that are the subject of the tender;

f) Any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as a consultant for Contract implementation;

g) Would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the contract specified in this Tender Document;

h) Has a close business or personal relationship with senior management or professional staff of the Procuring Entity who has the ability to influence the bidding process and:

i) Are directly or indirectly involved in the preparation of the Tender document or specifications of the Contract, and/or the Tender evaluation process of such contract; or

ii) May be involved in the implementation or supervision of such Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Procuring Entity throughout the tendering process and execution of the Contract.

3.4 A tenderer shall not be involved in corrupt, coercive, obstructive or fraudulent practice. A tenderer that is proven to have been involved in any of these practices shall be automatically disqualified

3.5 A Tenderer (either individually or as a JV member) shall not participate in more than one Tender, except for permitted alternative tenders. This includes participation as a subcontractor in other

Tenders. Such participation shall result in the disqualification of all Tenders in which the firm is involved. Members of a joint venture may not also make an individual tender, be a sub-contractor in a separate tender or be part of another joint venture for the purposes of the same Tender. A firm that is not a tenderer or a JV member may participate as a subcontractor in more than one tender.

3.6 A Tenderer may have the nationality of any country, subject to the restrictions pursuant to ITT3.9. A Tenderer shall be deemed to have the nationality of a country if the Tenderer is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed sub-contractors or sub-consultants for any part of the Contract including related Services.

3.7 A Tenderer that has been debarred from participating in public procurement shall be ineligible to tender or be awarded a contract. The list of debarred firms and individuals is available from the website of PPRA www.ppra.go.ke.

3.8 A Tenderer that is a state-owned enterprise or a public institution in Kenya may be eligible to tender and be awarded Contract(s) only if it is determined by the Procuring Entity to meet the following conditions, i.e. if it is:

i) A legal public entity of Government and/or public administration,

ii) financially autonomous and not receiving any significant subsidies or budget support from any public entity or Government, and;

(iii) operating under commercial law and vested with legal rights and liabilities similar to any commercial enterprise to enable it compete with firms in the private sector on an equal basis.

3.9 Firms and individuals shall be ineligible if their countries of origin are:

(a) As a matter of law or official regulations, Kenya prohibits commercial relations with that country;

(b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Kenya prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country.

A tenderer shall provide such documentary evidence of eligibility satisfactory to the Procuring Entity, as the Procuring Entity shall reasonably request.

3.10 Foreign tenderers are required to source at least forty (40%) percent of their contract inputs (in supplies, local sub-contracts and labor) from citizen suppliers and contractors. To this end, a foreign tenderer shall provide in its tender documentary evidence that this requirement is met. Foreign tenderers not meeting this criterion will be automatically disqualified. Information required to enable the Procuring Entity determine if this condition is met shall be provided for this purpose in "SECTIONI II - EVALUATION AND QUALIFICATION CRITERIA, Item 9".

3.11 Pursuant to the eligibility requirements of ITT 3.10, a tender is considered a foreign tenderer, If it is registered in Kenya and has less than 51 percent ownership by nationals of Kenya and if it does not subcontract to foreign firms or individuals more than 10 percent of the contract price, excluding provisional sums. JVs are considered as foreign tenderers if the individual member firms registered

in Kenya have less 51 percent ownership by nationals of Kenya. The JV shall not subcontract to foreign firms more than 10 percent of the contract price, excluding provisional sums.

3.12 The National Construction Authority Act of Kenya requires that all local and foreign contractors be registered with the National Construction Authority and be issued with a Registration Certificate before they can undertake any construction works in Kenya. Registration shall not be a condition for tender, but it shall be a condition of contract award and signature. A selected tenderer shall be given opportunity to register before such award and signature of contract. Application for registration with National Construction Authority may be accessed from the website www.nca.go.ke.

3.13 The Competition Act of Kenya requires that firms wishing to tender as Joint Venture undertakings which may prevent, distort or lessen competition in provision of services are prohibited unless they are exempt in accordance with the provisions of Section 25 of the Competition Act, 2010. JVs will be required to seek for exemption from the Competition Authority. Exemption shall not be a condition for tender, but it shall be a condition of contract award and signature. A JV tenderer shall be given opportunity to seek such exemption as a condition of award and signature of contract. Application for exemption from the Competition Authority of Kenya may be accessed from the website www.cak.go.ke.

4.14 A Kenyan tenderer shall be eligible to tender if it provides evidence of having fulfilled his/her tax obligations by producing valid tax compliance certificate or tax exemption certificate issued by the Kenya Revenue Authority.

4.0 Eligible goods, equipment, and services

4.1 Goods, equipment and services to be supplied under the Contract may have their origin in any country that is not ineligible under ITT 3.9. At the Procuring Entity's request, Tenderers may be required to provide evidence of the origin of Goods, equipment and services.

4.2 Any goods, works and production processes with characteristics that have been declared by the relevant national environmental protection agency or by other competent authority as harmful to human beings and to the environment shall not be eligible for procurement.

5.0 Tenderer's responsibilities

5.1 The tenderer shall bear all costs associated with the preparation and submission of his/her tender, and the Procuring Entity will in no case be responsible or liable for those costs.

5.2 The tenderer, at the tenderer's own responsibility and risk, is encouraged to visit and examine and inspect the Site of the Works and its surroundings and obtain all information that may be necessary for preparing the tender and entering into a contract for construction of the Works. The costs of visiting the Site shall beat the tenderer's own expense.

5.3 The Tenderer and any of its personnel or agents will be granted permission by the Procuring Entity to enter upon its premises and lands for the purpose of such visit. The Tenderer shall indemnify the Procuring Entity again stall liability arising from death or personal injury, loss of or damage to property, and any other losses and expenses incurred as a result of the examination and inspection.

5.4 The tenderer shall provide in the Form of Tender and Qualification Information, a preliminary description of the proposed work method and schedule, including charts, as necessary or required.

B. CONTENTS OF TENDER DOCUMENTS

6.0 Sections of Tender Document

6.1 The tender document consists of Parts 1, 2, and 3, which includes all the sections specified below, and which should be read in conjunction with any Addenda issued in accordance with ITT 10.

PART 1: Tendering Procedures

Section I – Instructions toTenderers

Section II – Tender Data Sheet (TDS)

Section III- Evaluation and Qualification Criteria Section IV – Tendering Forms

PART 2: Works' Requirements Section V - Bills of Quantities Section VI - Specifications Section VII - Drawings

PART 3: Conditions of Contract and Contract Forms

Section VIII - General Conditions (GCC)

Section IX - Special Conditions of Contract

Section X- Contract Forms

6.2 The Invitation to Tender Notice issued by the Procuring Entity is not part of the Contract documents. Unless obtained directly from the Procuring Entity, the Procuring Entity is not responsible for the completeness of the Tender document, responses to requests for clarification, the minutes of a pre-arranged site visit and those of the pre-Tender meeting (if any), or Addenda to the Tender document in accordance with ITT 10. Incase of any contradiction, documents obtained directly from the Procuring Entity shall prevail.

6.3 The Tenderer is expected to examine all instructions, forms, terms, and specifications in the Tender Document and to furnish with its Tender all information and documentation as is required by the Tender document.

7.0 Clarification of Tender Document, Site Visit, Pre-tender Meeting

7.1 A Tenderer requiring any clarification of the Tender Document shall contact the Procuring Entity in writing at the Procuring Entity's address specified in the TDS or raise its enquiries during the pre-Tender meeting if provided for in accordance with ITT 7.2. The Procuring Entity will respond in writing to any request for clarification, provided that such request is received no later than the period specified in the TDS prior to the deadline for submission of tenders. The Procuring Entity shall forward copies of its response to all tenderers who have acquired the Tender documents in accordance with ITT 7.4, including a description of the inquiry but without identifying its source. If so specified in the TDS, the Procuring Entity shall also promptly publish its response at the web page identified in the TDS. Should the clarification result in changes to the essential elements of the Tender Documents, the Procuring Entity shall amend the Tender Documents following the procedure under ITT 8 and ITT 22.2.

7.2 The Tenderer, at the Tenderer's own responsibility and risk, is encouraged to visit and examine and inspect the site(s) of the required contracts and obtain all information that may be necessary for preparing a tender. The costs of visiting the Site shall be at the Tenderer's own expense. The Procuring Entity shall specify in the TDS if a pre-arranged Site visit and or a pre-tender meeting will be held, when and where. The Tenderer's designated representative is invited to attend a pre-arranged site visit and a pre-tender meeting, as the case may be. The purpose of the site visit and the pre-tender meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

7.3 The Tenderer is requested to submit any questions in writing, to reach the Procuring Entity not later than the period specified in the TDS before the meeting.

7.4 Minutes of a pre-arranged site visit and those of the pre-tender meeting, if applicable, including the text of the questions asked by Tenderers and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Tenderers who have acquired the Tender Documents. Minutes shall not identify the source of the questions asked.

7.5 TheProcuring Entity shall al so promptly publish anonymized (no names) Minutes of the pre-arranged site visit and those of the pre-tender meeting at the web page identified in the TDS. Any modification to the Tender Documents that may become necessary as a result of the pre-arranged site visit and those of the pre-tender meeting shall be made by the Procuring Entity exclusively through the issue of an Addendum pursuant to ITT 8 and not through the minutes of the pre-Tender meeting. Non-attendance at the pre-arranged site visit and the pre-tender meeting will not be a cause for disqualification of a Tenderer.

8.0 Amendment of Tender Documents

8.1 At any time prior to the deadline for submission of Tenders, the Procuring Entity may amend the Tender Documents by issuing addenda.

8.2 Any addendum issued shall be part of the Tender Documents and shall be communicated in writing to all who have obtained the Tender Documents from the Procuring Entity. The Procuring Entity shall also promptly publish the addendum on the Procuring Entity's website in accordance with ITT 7.5.

8.3 To give Tenderers reasonable time in which to take an addendum into account in preparing their Tenders, the Procuring Entity should extend the dead line for the submission of Tenders, pursuant to ITT 22.2.

C. PREPARATION OF TENDERS

9. Cost of Tendering

The Tenderer shall bear all costs associated with the preparation and submission of its Tender, and the Procuring Entity shall not be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.

10.0 Language of Tender

The Tender, as well as all correspondence and documents relating to the tender exchanged by the tenderer and the Procuring Entity, shall be written in the English Language. Supporting documents and printed literature that are part of the Tender may be in another language provided they are

accompanied by an accurate and notarized translation of the relevant passages into the English Language, in which case, for purposes of interpretation of the Tender, such translation shall govern.

11.0 Documents Comprising the Tender

11.1 The Tender shall comprise the following:

a) Form of Tender prepared in accordance with ITT 12;

b) Schedules including priced Bill of Quantities, completed in accordance with ITT 12 and ITT 14;

c) Tender Security or Tender-Securing Declaration, in accordance with ITT 19.1;

d) Alternative Tender, if permissible, in accordance with ITT 13;

e) Authorization: written confirmation authorizing the signatory of the Tender to commit the Tenderer, in accordancewithITT20.3;

f) Qualifications: documentary evidence in accordance with ITT 17 establishing the Tenderer's qualifications to perform the Contract if its Tender is accepted;

g) Conformity: a technical proposal in accordance with ITT 16;

h) Any other document required in the TDS.

11.2 In addition to the requirements under ITT 11.1, Tenders submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Tender shall be signed by all members and submitted with the Tender, together with a copy of the proposed JV Agreement. Change of membership and conditions of the JV prior to contract signature will render the tenderliable for disqualification.

12.0 Form of Tender and Schedules

12.1 The Form of Tender and Schedules, including the Bill of Quantities, shall be prepared using the relevant forms furnished in Section IV, Tendering Forms. The forms must be completed with out any alterations to the text, and no substitutes shall be accepted except as provided under ITT 20.3. All blank spaces shall be filled in with the information requested. The Tenderer shall chronologically serialize all pages of the tender documents submitted.

12.2 The Tenderer shall furnish in the Form of Tender information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Tender.

13. Alternative Tenders

13.1 Unless otherwise specified in the TDS, alternative Tenders shall not be considered.

13.2 When alternative times for completion are explicitly invited, a statement to that effect will be included in the TDS, and the method of evaluating different alternative times for completion will be described in Section III, Evaluation and Qualification Criteria.

13.3 Except as provided under ITT 13.4 below, Tenderers wishing to offer technical alternatives to the requirements of the Tender Documents must first price the Procuring Entity's design as described in the Tender Documents and shall further provide all information necessary for a complete evaluation of the alternative by the Procuring Entity, including drawings, design calculations, technical

specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the Tenderer with the Winning Tender conforming to the basic technical requirements shall be considered by the Procuring Entity.

13.4 When specified in the TDS, Tenderers are permitted to submit alternative technical solutions for specified parts of the Works, and such parts will be identified in the TDS, as will the method for their evaluating, and described in Section VII, Works' Requirements.

14.0 Tender Prices and Discounts

14.1 The prices and discounts (including any price reduction) quoted by the Tenderer in the Form of Tender and in the Bill of Quantities shall conform to the requirements specified below.

14.2 The Tenderer shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Tenderer shall be deemed covered by the rates for other items in the Bill of Quantities and will not be paid for separately by the Procuring Entity. An item not listed in the priced Bill of Quantities shall be assumed to be not included in the Tender, and provided that the Tender is determined substantially responsive notwithstanding this omission, the average price of the item quoted by substantially responsive Tenderers will be added to the Tender price and the equivalent total cost of the Tender so determined will be used for price comparison.

14.3 The price to be quoted in the Form of Tender, in accordance with ITT 12.1, shall be the total price of the Tender, including any discounts offered.

14.4 The Tenderer shall quote any discounts and the methodology for their application in the Form of Tender, in accordance with ITT 12.1.

14.5 It will be specified in the TDS if the rates and prices quoted by the Tenderer are or are not subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, except incases where the contract is subject to fluctuations and adjustments, not fixed price. In such a case, the Tenderer shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data and the Procuring Entity may require the Tenderer to justify its proposed indices and weightings.

14.6 Where tenders are being invited for individual lots (contracts)or for any combination of lots (packages), tenderers wishing to offer discounts for the award of more than one Contract shall specify in their Tender the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITT 14.4, provided the Tenders for all lots (contracts) are opened at the same time.

14.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 30 days prior to the deadline for submission of Tenders, shall be included in the rates and prices and the total Tender Price submitted by the Tenderer.

15.0 Currencies of Tender and Payment

15.1 The currency(ies) of the Tender and the currency(ies) of payments shall be the same.

15.2 Tenderers shall quote entirely in Kenya Shillings. The unit rates and the prices shall be quoted by the Tenderer in the Bill of Quantities, entirely in Kenya shillings.

a) A Tenderer expecting to incur expenditures in other currencies for inputs to the Works supplied from outside Kenya (referred to as "the foreign currency requirements") shall (if so allowed in the TDS) indicate in the Appendix to Tender the percentage(s) of the Tender Price (excluding Provisional Sums), needed by the Tenderer for the payment of such foreign currency requirements, limited to no more than two foreign currencies.

b) The rates of exchange to be used by the Tenderer in arriving at the local currency equivalent and the percentage(s) mentioned in (a) above shall be specified by the Tenderer in the Appendix to Tender and shall be based on the exchange rate provided by the Central Bank of Kenya on the date 30 days prior to the actual date of tender opening. Such exchange rate shall apply for all foreign payments under the Contract.

15.3 Tenderers may be required by the Procuring Entity to justify, to the Procuring Entity's satisfaction, their local and foreign currency requirements, and to substantiate that the amounts included in the unit rates and prices and shown in the Schedule of Adjustment Data in the Appendix to Tender are reasonable, in which case a detailed break down of the foreign currency requirements shall be provided by Tenderers.

16.0 Documents Comprising the Technical Proposal

The Tenderer shall furnish a technical proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section IV, Tender Forms, insufficient detail to demonstrate the adequacy of the Tenderer's proposal to meet the work's requirements and the completion time.

17.0 Documents Establishing the Eligibility and Qualifications of the Tenderer

17.1 Tenderers shall complete the Form of Tender, included in Section IV, Tender Forms, to establish Tenderer's eligibility in accordance with ITT 4.

17.2 In accordance with Section III, Evaluation and Qualification Criteria, to establish its qualifications to perform the Contract the Tenderer shall provide the information requested in the corresponding information sheets included in Section IV, Tender Forms.

17.3 If a margin of preference applies as specified in accordance with ITT 33.1, nation al tenderers, individually or in joint ventures, applying for eligibility for national preference shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITT 33.1.

17.4 Tenderers shall be asked to provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by the Procuring Entity, a particular contractor or group of contractors qualifies for a margin of preference. Further the information will enable the Procuring Entity identify any actual or potential conflict of interest in relation to the procurement and/or contract management processes, or a possibility of collusion between tenderers, and thereby help to prevent any corrupt influence in relation to the procurement process or contract management.

17.5 The purpose of the information described in ITT 17.4 above overrides any claims to confidentiality which a tenderer may have. There can be no circumstances in which it would be justified for a tenderer to keep information relating to its ownership and control confidential where it is tendering to undertake public sector work and receive public sector funds. Thus, confidentiality will not be

accepted by the Procuring Entity as a justification for a Tenderer's failure to disclose, or failure to provide required information on its ownership and control.

17.6 The Tenderer shall provide further documentary proof, information or authorizations that the Procuring Entity may request in relation to owner ship and control which in formation on any changes to the information which was provided by the tenderer under ITT 6.4. The obligations to require this information shall continue for the duration of the procurement process and contract performance and after completion of the contract, if any change to the information previously provided may reveal a conflict of interest in relation to the award or management of the contract.

17.7 All information provided by the tenderer pursuant to these requirements must be complete, current and accurate as at the date of provision to the Procuring Entity. In submitting the information required pursuant to these requirements, the Tenderer shall warrant that the information submitted is complete, current and accurate as at the date of submission to the Procuring Entity.

17.8 If a tenderer fails to submit the information required by these requirements, its tender will be rejected. Similarly, if the Procuring Entity is unable, after taking reasonable steps, to verify to a reasonable degree the information submitted by a tenderer pursuant to these requirements, then the tender will be rejected.

17.9 If information submitted by a tenderer pursuant to these requirements, or obtained by the Procuring Entity (whether through its own enquiries, through notification by the public or otherwise), shows any conflict of interest which could materially and improperly benefit the tenderer in relation to the procurement or contract management process, then:

i) If the procurement process is still ongoing, the tenderer will bed is qualified from the procurement process,

ii) if the contract has been awarded to that tenderer, the contract award will be set as idepending the outcome of (iii),

iii) the tenderer will be referred to the relevant law enforcement authorities for investigation of whether the tenderer or any other person shave committed any criminal offence.

17.10 If a tenderer submits information pursuant to these requirements that is in complete, in accurate or out-of-date, or attempts to obstruct the verification process, then the consequences ITT 17.8 will ensue unless the tenderer can show to the reasonable satisfaction of the Procuring Entity that any such act was not material, or was due to genuine error which was not attributable to the intentional act, negligence or recklessness of the tender.

18.0 Period of Validity of Tenders

18.1. Tenders shall remain valid for the Tender Validity period specified in the TDS. The Tender Validity period starts from the date fixed for the Tender submission deadline (as prescribed by the Procuring Entity in accordance with ITT 22). At ender valid for a shorter period shall be rejected by the Procuring Entity as non-responsive.

18.2 In exceptional circumstances, prior to the expiration of the Tender validity period, the Procuring Entity may request Tenderers to extend the period of validity of their Tenders. The request and the responses shall be made in writing. If a Tender Security is requested in accordance with ITT 19, it shall also be extended for thirty (30) days beyond the deadline of the extended validity period. A

Tenderer may refuse the request without forfeiting its Tender security. A Tenderer granting the request shall not be required or permitted to modify its Tender.

19.0 Tender Security

19.1 The Tenderer shall furnish as part of its Tender, either a Tender-Securing Declaration or a Tender Security as specified in the TDS, in original form and, in the case of a Tender Security, in the amount and currency specified in the TDS. A Tender-Securing Declaration shall use the form included in Section IV, Tender Forms.

19.2 If a Tender Security is specified pursuant to ITT 19.1, the Tender Security shall be a demand guarantee in any of the following forms at the Tenderer's option:

l) cash;

ii) a bank guarantee;

iii) a guarantee by an insurance company registered and licensed by the Insurance Regulatory Authority listed by the Authority;

(iv) a guarantee issued by a financial institution approved and licensed by the Central Bank of Kenya, from a reputable source, and an eligible country.

19.3 If an unconditional bank guarantee is issued by a bank located outside Kenya, the issuing bank shall have a correspondent bank located in Kenya to make it enforceable. The Tender Security shall be valid for thirty (30) days beyond the original validity period of the Tender, or beyond any period of extension if requested under ITT 18.2.

19.4 If a Tender Security or Tender-Securing Declaration is specified pursuant to ITT 19.1, any Tender not accompanied by a substantially responsive Tender Security or Tender-Securing Declaration shall be rejected by the Procuring Entity as non-responsive.

19.5 If a Tender Security is specified pursuant to ITT 19.1, the Tender Security of unsuccessful Tenderers shall be returned as promptly as possible upon the successful Tenderer's signing the Contract and furnishing the Performance Security and any other documents required in the TDS. The Procuring Entity shall also promptly return the tender security to the tenderers where the procurement proceedings are terminated, all tenders were determined non-responsive or a bidder declines to extend tender validity period.

19.6 The Tender Security of the successful Tenderer shall be returned as promptly as possible once the successful Tenderer has signed the Contract and furnished the required Performance Security, and any other documents required in the TDS.

19.7 The Tender Security may be forfeited or the Tender-Securing Declaration executed:

a) if a Tenderer withdraws its Tender during the period of Tender validity specified by the Tenderer on the Form of Tender, or any extension there to provided by the Tenderer; or

b) if the successful Tenderer fails to: -

i) sign the Contract in accordance with ITT47; or

ii) furnish a Performance Security and if required in the TDS, and any other documents required in the TDS.

19.8 Where tender securing declaration is executed, the Procuring Entity shall recommend to the PPRA to debars the Tenderer from participating in public procurement as provided in the law.

19.9 The Tender Security or the Tender-Securing Declaration of a JV shall be in the name of the JV that submits the Tender. If the JV has not been legally constituted into a legally enforceable JV at the time of tendering, the Tender Security or the Tender-Securing Declaration shall be in the names of all future members as named in the letter of intent referred to in ITT 4.1 and ITT 11.2.

19.10 A tenderer shall not issue a tender security to guarantee itself.

20.0 Format and Signing of Tender

20.1 The Tenderer shall prepare one original of the documents comprising the Tender as described in ITT 11 and clearly mark it "ORIGINAL." Alternative Tenders, if permitted in accordance with ITT 13, shall be clearly marked "ALTERNATIVE." In addition, the Tenderer shall submit copies of the Tender, in the number specified in the TDS and clearly mark them "COPY." In the event of any discrepancy between the origin a land the copies, the original shall prevail.

20.2 Tenderers shall mark as "CONFIDENTIAL" all information in their Tenders which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.

20.3 The original and all copies of the Tender shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Tenderer. This authorization shall consist of a written confirmation as specified in the TDS and shall be attached to the Tender. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Tender where entries or amendments have been made shall be signed or initialed by the person signing the Tender.

20.4 Incase the Tenderer is a JV, the Tender shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.

20.5 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Tender.

D. SUBMISSION AND OPENING OF TENDERS

21.0 Sealing and Marking of Tenders

21.1 The Tenderer shall deliver the Tender in a single sealed envelope, or in a single sealed package, or in a single sealed container bearing the name and Reference number of the Tender, addressed to the Procuring Entity and a warning not to open before the time and date for Tender opening date. Within the single envelope, package or container, the Tenderer shall place the following separate, sealed envelopes:

a) in an envelope or package or container marked "ORIGINAL", all documents comprising the Tender, as described in ITT 11; and

b) in an envelope or package or container marked "COPIES", all required copies of the Tender; and

c) if alternative Tenders are permitted in accordance with ITT 13, and if relevant:

i) in an envelope or package or container marked "ORIGINAL –ALTERNATIVE TENDER", the alternative Tender; and

ii) in the envelope or package or container marked "COPIES- ALTERNATIVE TENDER", all required copies of the alternative Tender.

The inner envelopes or packages or containers shall:

a) bear the name and address of the Procuring Entity,

b) bear the name and address of the Tenderer; and

c) bear the name and Reference number of the Tender.

21.2 If an envelope or package or container is not sealed and marked as required, the Procuring Entity will assume no responsibility for the misplacement or premature opening of the Tender. Tenders misplaced or opened prematurely will not be accepted.

22.0 Deadline for Submission of Tenders

22.1 Tenders must be received by the Procuring Entity at the address specified in the TDS and no later than the date and time also specified in the TDS. When so specified in the TDS, tenderers shall have the option of submitting their Tenders electronically. Tenderers submitting Tenders electronically shall follow the electronic Tender submission procedures specified in the TDS.

22.2 The Procuring Entity may, at its discretion, extend the deadline for the submission of Tenders by amending the Tender Documents in accordance with ITT 8, in which case all rights and obligations of the Procuring Entity and Tenderers previously subject to the deadline shall there after be subject to the deadline as extended.

23.0 Late Tenders

The Procuring Entity shall not consider any Tender that arrives after the deadline for submission of tenders, in accordance with ITT 22. Any Tender received by the Procuring Entity after the deadline for submission of Tenders shall be declared late, rejected, and returned unopened to the Tenderer.

24.0 Withdrawal, Substitution, and Modification of Tenders

24.1 A Tenderer may withdraw, substitute, or modify its Tender after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITT 20.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Tender must accompany the respective written notice. All notices must be:

a) prepared and submitted in accordance with ITT 20 and ITT 21 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," "MODIFICATION;" and

b) received by the Procuring Entity prior to the deadline prescribed for submission of Tenders, in accordance with ITT 22.

24.2 Tenders requested to be withdrawn in accordance with ITT 24.1 shall be returned unopened to the Tenderers.

24.3 No Tender may be withdrawn, substituted, or modified in the interval between the deadline for submission of Tenders and the expiration of the period of Tender validity specified by the Tenderer on the Form of Tender or any extension thereof.

25. Tender Opening

25.1 Except in the cases specified in ITT 23 and ITT 24.2, the Procuring Entity shall publicly open and read out all Tenders received by the deadline, at the date, time and place specified in the TDS, in the presence of Tenderers' designated representatives who chooses to attend. Any specific electronic Tender opening procedures required if electronic Tendering is permitted in accordance with ITT 22.1, shall be as specified in the TDS.

25.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelopes with the corresponding Tender shall not be opened but returned to the Tenderer. No Tender withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at Tender opening.

25.3 Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding Tender being substituted, and the substituted Tender shall not be opened, but returned to the Tenderer. No Tender substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Tender opening.

25.4 Next, envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Tender. No Tender modification shall be permitted unless the corresponding modification notice contains a valid authorizationtorequestthemodificationandisreadoutatTenderopening.

25.5 Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Tenderer and whether there is a modification; the total Tender Price, per lot (contract) if applicable, including any discounts and alternative Tenders; the presence or absence of a Tender Security or Tender-Securing Declaration, if required; and any other details as the Procuring Entity may consider appropriate.

25.6 Only Tenders, alternative Tenders and discounts that are opened and read out at Tender opening shall be considered further for evaluation. The Form of Tender and pages of the Bill of Quantities (to be decided on by the tender opening committee) are to be initialed by the members of the tender opening committee attending the opening.

25.7 At the Tender Opening, the Procuring Entitys hall neither discuss the merits of any Tender nor reject any Tender (except for late Tenders, in accordance with ITT 23.1).

25.8 The Procuring Entity shall prepare minutes of the Tender Opening that shall include, as a minimum: -

a) the name of the Tenderer and whether there is a withdrawal, substitution, or modification;

b) the Tender Price, per lot (contract) if applicable, including any discounts;

c) any alternative Tenders;

d) the presence or absence of a Tender Security, if new as required;

e) number of pages of each tender document submitted.

25.9 The Tenderers' representatives who are present shall be requested to sign the minutes. The omission of a Tenderer's signature on the minutes shall not invalidate the contents and effect of the minutes. A copy of the tender opening register shall be distributed to all Tenderers.

E. EVALUATION AND COMPARISON OF TENDERS

26. Confidentiality

26.1 Information relating to the evaluation of Tenders and recommendation of contract award shall not be disclosed to Tenderers or any other persons not officially concerned with the Tender process until information on Intention to Award the Contract is transmitted to all Tenderers in accordance with ITT 43.

26.2 Any effort by a Tenderer to influence the Procuring Entity in the evaluation of the Tenders or Contract award decisions may result in the rejection of its tender.

26.3 Notwithstanding ITT 26.2, from the time of tender opening to the time of contract award, if a tenderer wishes to contact the Procuring Entity on any matter related to the tendering process, it shall do so in writing.

27.0 Clarification of Tenders

27.1 To assist in the examination, evaluation, and comparison of the tenders, and qualification of the tenderers, the Procuring Entity may, at its discretion, ask any tenderer for a clarification of its tender, given a reasonable time for a response. Any clarification submitted by a tenderer that is not in response to a request by the Procuring Entity shall not be considered. The Procuring Entity's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or substance of the tender shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Procuring Entity in the evaluation of the tenders, in accordance with ITT 31.

27.2 If a tenderer does not provide clarifications of its tender by the date and time set in the Procuring Entity's request for clarification, its Tender may be rejected.

28.0 Deviations, Reservations, and Omissions

28.1 During the evaluation of tenders, the following definitions apply: -

a) "Deviation" is a departure from the requirements specified in the tender document;

b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the tender document; and

c) "Omission" is the failure to submit part or all of the information or documentation required in the Tender document.

29.0 Determination of Responsiveness

29.1 The Procuring Entity's determination of a Tender's responsiveness is to be based on the contents of the tender itself, as defined in ITT 11.

29.2 A substantially responsive Tender is one that meets the requirements of the Tender document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that, if accepted, would:

a) Affect in any substantial way the scope, quality, or performance of the Works specified in the Contract;

b) limit in any substantial way, inconsistent with the tender document, the Procuring Entity's rights or the tenderer's obligations under the proposed contract;

c) if rectified, would unfairly affect the competitive position of other tenderers presenting substantially responsive tenders.

29.3 The Procuring Entity shall examine the technical aspects of the tender submitted in accordance with ITT 16, to confirm that all requirements of Section VII, Works' Requirements have been met without any material deviation, reservation or omission.

29.4 If a tender is not substantially responsive to the requirements of the tender document, it shall be rejected by the Procuring Entity and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

30.0 Non-material Non-conformities

30.1 Provided that a tender is substantially responsive, the Procuring Entity may waive any non-conformities in the tender.

30.2 Provided that a Tender is substantially responsive, the Procuring Entity may request that the tenderer submit the necessary information or documentation, within a reasonable period of time, to rectify non-material non- conformities in the tender related to documentation requirements. Requesting information or documentation on such non-conformities shall not be related to any aspect of the price of the tender. Failure of the tenderer to comply with the request may result in the rejection of its tender.

30.3 Provided that a tender is substantially responsive, the Procuring Entity shall rectify quantifiable non-material non-conformities related to the Tender Price. To this effect, the Tender Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component in the manner specified in the TDS.

31.0 Arithmetical Errors

31.1 The tender sum as submitted and read out during the tender opening shall be absolute and final and shall not be the subject of correction, adjustment or amendment in any way by any person or entity.

31.2 Provided that the Tender is substantially responsive, the Procuring Entity shall handle errors on the following basis: -

a) Any error detected if considered a major deviation that affects the substance of the tender, shall lead to disqualification of the tender as non-responsive.

b) Any errors in the submitted tender arising from a miscalculation of unit price, quantity, subtotal and total bid price shall be considered as a major deviation that affects the substance of the tender and shall lead to disqualification of the tender as non-responsive. and

c) if there is a discrepancy between words and figures, the amount in words shall prevail

31.3 Tenderers shall be notified of any error detected in their bid during the notification of award.

32.0 Conversion to Single Currency

For evaluation and comparison purposes, the currency(ies) of the Tender shall be converted in to a single currency as specified in the TDS.

33.0 Margin of Preference and Reservations

33.1 A margin of preference may be allowed only when the contract is open to international competitive tendering where foreign contractors are expected to participate in the tendering process and where the contract exceeds the value/threshold specified in the Regulations.

33.2 A margin of preference shall not be allowed unless it is specified so in the TDS.

33.3 Contracts procured on basis of international competitive tendering shall not be subject to reservations exclusive to specific groups as provided in ITT 33.4.

33.4 Where it is intended to reserve a contract to a specific group of businesses (these groups are Small and Medium Enterprises, Women Enterprises, Youth Enterprises and Enterprises of persons living with disability, as the case may be), and who are appropriately registered as such by the authority to be specified in the TDS, a procuring entity shall ensure that the invitation to tender specifically indicates that only businesses or firms belonging to the specified group are eligible to tender. No tender shall be reserved to more than one group. If not so stated in the Invitation to Tender and in the Tender documents, the invitation to tender will be open to all interested tenderers.

34.0 Nominated Subcontractors

34.1 Unless otherwise stated in the TDS, the Procuring Entity does not intend to execute any specific elements of the Works by subcontractors selected/nominated by the Procuring Entity. Incase the Procuring Entity nominates a subcontractor, the subcontract agreement shall be signed by the Subcontractor and the Procuring Entity. The main contract shall specify the working arrangements between the main contractor and the nominated subcontractor.

34.2 Tenderers may propose sub-contracting up to the percentage of total value of contracts or the volume of works as specified in the TDS. Subcontractors proposed by the Tenderer shall be fully qualified for their parts of the Works.

34.3 Domestic subcontractor's qualifications shall not be used by the Tenderer to qualify for the Works unless their specialized parts of the Works were previously designated so by the Procuring Entity in the TDS a scan be met by subcontractors referred to hereafter as 'Specialized Subcontractors', in which case, the qualifications of the Specialized Sub contractors proposed by the Tenderer may be added to the qualifications of the Tenderer.

35. Evaluation of Tenders

35.1 TheProcuring Entity shall use the criteria and methodologies listed in this ITT and Section III, Evaluation and Qualification Criteria No other evaluation criteria or methodologies shall be permitted. By applying the criteria and methodologies the Procuring Entity shall determine the Lowest Evaluated Tender in accordance with ITT 40.

35.2 To evaluate a Tender, the Procuring Entity shall consider the following:

a) price adjustment in accordance with ITT 31.1 (iii); excluding provisional sums and contingencies, if any, but including Daywork items, where priced competitively;

b) price adjustment due to discounts offered in accordance with ITT 14.4;

c) converting the amount resulting from applying (a) and (b) above, if relevant, to a single currency in accordance with ITT 32;

d) price adjustment due to quantifiable non material non-conformities in accordance with ITT 30.3; and

e) any additional evaluation factors specified in the TDS and Section III, Evaluation and Qualification Criteria.

35.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be considered in Tender evaluation.

35.4 Where the tender involves multiple lots or contracts, the tenderer will be allowed to tender for one or more lots (contracts). Each lot or contract will be evaluated in accordance with ITT 35.2. The methodology to determine the lowest evaluated tenderer or tenderers base done lot (contract) or based on a combination of lots (contracts), will be specified in Section III, Evaluation and Qualification Criteria. In the case of multiple lots or contracts, tenderer will be will be required to prepare the Eligibility and Qualification Criteria Form for each Lot.

36.0 Comparison of tenders

The Procuring Entity shall compare the evaluated costs of all substantially responsive Tenders established in accordance with ITT 35.2 to determine the Tender that has the lowest evaluated cost.

37.0 Abnormally low tenders and abnormally high tenders

Abnormally Low Tenders

37.1 An Abnormally Low Tender is one where the Tender price, in combination with other elements of the Tender, appears so low that it raises material concerns as to the capability of the Tenderer in regards to the Tenderer's ability to perform the Contract for the offered Tender Price or that genuine competition between Tenderers is compromised.

37.2 In the event of identification of a potentially Abnormally Low Tender, the Procuring Entity shall seek written clarifications from the Tenderer, including detailed price analyses of its Tender price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the Tender document.

37.3 After evaluation of the price analyses, in the event that the Procuring Entity determines that the Tenderer has failed to demonstrate its capability to perform the Contract for the offered Tender Price, the Procuring Entity shall reject the Tender.

Abnormally high tenders

37.4 An abnormally high tender price is one where the tender price, in combination with other constituent elements of the Tender, appears unreasonably too high to the extent that the Procuring Entity is concerned that it (the Procuring Entity) may not be getting value for money or it may be paying too high a price for the contract compared with market prices or that genuine competition between Tenderers is compromised.

37.5 Incase of a nab normally high price, the Procuring Entity shall make a survey of the market prices, check if the estimated cost of the contract is correct and review the Tender Documents to check if the specifications, scope of work and conditions of contract are contributory to the abnormally high tenders. The Procuring Entity may also seek written clarification from the tenderer on the reason for the high tender price. The Procuring Entity shall proceed as follows:

i) If the tender price is abnormally high based on wrong estimated cost of the contract, the Procuring Entity may accept or not accept the tender depending on the Procuring Entity's budget considerations.

ii) If specifications, scope of work and/or conditions of contract are contributory to the abnormally high tender prices, the Procuring Entity shall reject all tenders and may retender for the contract based on revised estimates, specifications, scope of work and conditions of contract, as the case may be.

37.6 If the Procuring Entity determines that the Tender Price is abnormally too high because genuine competition between tenderers is compromised (often due to collusion, corruption or other manipulations), the Procuring Entity shall reject all Tenders and shall institute or cause competent Government Agencies to institute an investigation on the cause of the compromise, before retendering.

38.0 Unbalanced and/ or front-loaded tenders

38.1 If in the Procuring Entity's opinion, the Tender that is evaluated as the lowest evaluated price is seriously unbalanced and/or frontloaded, the Procuring Entity may require the Tenderer to provide written clarifications. Clarifications may include detailed price analyses to demonstrate the consistency of the tender prices with the scope of works, proposed methodology, schedule and any other requirements of the Tender document.

38.2 After the evaluation of the information and detailed price analyses presented by the Tenderer, the Procuring Entity may as appropriate:

a) accept the Tender;

b) require that the total amount of the Performance Security be increased at the expense of the Tenderer to a level not exceeding a 30% of the Contract Price;

c) agree on a payment mode that eliminates the inherent risk of the Procuring Entity paying too much for undelivered works;

d) reject the Tender,

39.0 Qualifications of the tenderer

39.1 The Procuring Entity shall determine to its satisfaction whether the eligible Tenderer that is selected as having submitted the lowest evaluated cost and substantially responsive Tender, meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.

39.2 The determination shall be based upon an examination of the documentary evidence of the Tenderer's qualifications submitted by the Tenderer, pursuant to ITT 17. The determination shall not take into consideration the qualifications of other firms such as the Tenderer's subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Sub-contractors if permitted in the Tender document), or any other firm(s) different from the Tenderer.

39.3 An affirmative determination shall be a prerequisite for award of the Contract to the Tenderer. A negative determination shall result in disqualification of the Tender, in which event the Procuring Entity shall proceed to the Tenderer who offers a substantially responsive Tender with the next lowest evaluated price to make a similar determination of that Tenderer's qualifications to perform satisfactorily.

40.0 Lowest evaluated tender

Having compared the evaluated prices of Tenders, the Procuring Entity shall determine the Lowest Evaluated Tender. The Lowest Evaluated Tender is the Tender of the Tenderer that meets the Qualification Criteria and whose Tender has been determined to be:

a) Most responsive to the Tender document; and

b) the lowest evaluated price.

41.0 Procuring entity's right to accept any tender, and to reject any or all tenders.

The Procuring Entity reserves the right to accept or reject any Tender and to annul the Tender process and reject all Tenders at any time prior to Contract Award, without there by incurring any liability to Tenderers. Incase of annulment, all Tenders submitted and specifically, Tender securities, shall be promptly returned to the Tenderers.

F. AWARD OF CONTRACT

42.0 Award criteria

The Procuring Entity shall award the Contract to the successful tenderer whose tender has been determined to be the Lowest Evaluated Tender.

43.0 Notice of Intention to Enter into a Contract/Notification of Award

Upon award of the contract and Prior to the expiry of the Tender Validity Period the Procuring Entity shall issue a Notification of Intention to Enter into a Contract/Notification of award to all tenderers which shall contain, at a minimum, the following information:

a) the name and address of the Tenderer submitting the successful tender;

b) the Contract price of the successful tender;

c) a statement of the reason(s) the tender of the unsuccessful tenderer to whom the letter is addressed was unsuccessful, unless the price information in (c) above already reveals the reason;

d) the expiry date of the Standstill Period; and

e) instruction son how to request a debriefing and/ or submit a complaint during the stand still period;

44.0 Stand still Period

44.1 The Contract shall not be signed earlier than the expiry of a Standstill Period of 14 days to allow any dissatisfied tender to launch a complaint. Where only one Tender is submitted, the Standstill Period shall not apply.

44.2 Where a Standstill Period applies, it shall commence when the Procuring Entity has transmitted to each Tenderer the Notification of Intention to Enter into a Contract with the successful Tenderer.

45.0 Debriefing by The Procuring Entity

45.1 On receipt of the Procuring Entity's Notification of Intention to Enter into a Contract referred to in ITT 43, an unsuccessful tenderer may make a written request to the Procuring Entity for a debriefing on specific issues or concerns regarding their tender. The Procuring Entity shall provide the debriefing within five days of receipt of the request.

45.2 Debriefings of unsuccessful Tenderers may be done in writing or verbally. The Tenderer shall bear its own costs of attending such a debriefing meeting.

46.0 Letter of Award

Prior to the expiry of the Tender Validity Period and upon expiry of the Standstill Period specified in ITT 42.1, upon addressing a complaint that has been filed with in the Standstill Period, the Procuring Entity shall transmit the Letter of Award to the successful Tenderer. The letter of award shall request the successful tenderer to furnish the Performance Security within 21 days of the date of the letter.

47.0 Signing of Contract

47.1 Upon the expiry of the fourteen days of the Notification of Intention to enter in to contract and upon the parties meeting their respective statutory requirements, the Procuring Entity shall send the successful Tenderer the Contract Agreement.

47.2 Within fourteen (14) days of receipt of the Contract Agreement, the successful Tenderer shall sign, date, and return it to the Procuring Entity.

47.3 The written contract shall be entered into within the period specified in the notification of award and before expiry of the tender validity period.

48.0 Performance Security

48.1 Within twenty-one (21) days of the receipt of the Letter of Award from the Procuring Entity, the successful Tenderer shall furnish the Performance Security and, any other documents required in the TDS, in accordance with the General Conditions of Contract, subject to ITT 38.2 (b), using the Performance Security and other Forms included in Section X, Contract Forms, or another form acceptable to the Procuring Entity. A foreign institution providing a bank guarantee shall have a correspondent financial institution located in Kenya, unless the Procuring Entity has agreed in writing that a correspondent bank is not required.

48.2 Failure of the successful Tenderer to submit the above-mentioned Performance Security and other documents required in the TDS or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Tender Security. In that event the Procuring Entity may award the Contract to the Tenderer offering the next Best Evaluated Tender.

48.3 Performance security shall not be required for contracts estimated to cost less than the amount specified in the Regulations.

49.0 Publication of Procurement Contract

Within fourteen days after signing the contract, the Procuring Entity shall publish the awarded contract at its notice boards and websites; and on the Website of the Authority. At the minimum, the notice shall contain the following information:

a) name and address of the Procuring Entity;

b) name and reference number of the contract being awarded, a summary of its scope and the selection method used;

c) the name of the successful Tenderer, the final total contract price, the contract duration;

d) dates of signature, commencement and completion of contract;

e) names of all Tenderers that submitted Tenders, and their Tender prices as readout at Tender opening.

50.0 Procurement related Complaints and Administrative Review

50.1 The procedures for making Procurement-related Complaints are as specified in the TDS.

50.2 A request for administrative review shall be made in the form provided under contract forms.

SECTION II - TENDER DATA SHEET (TDS)

The following specific data shall complement, supplement, or amend the provisions in the Instructions to Tenderers (ITT). Whenever there is a conflict, the provisions herein shall prevail over those in ITT.

Reference to ITC Clause	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
A. General	
ITT 1.1	The name of the contract is: ***The Proposed rehabilitation and modernization of Kenyatta stadium – Phase 1A Completion*** The reference number of the Contract is: CGTN/YSTD/T001/2026-2027 The number and identification of lots (contracts) comprising this Tender are: N/A
ITT 2.4	The Information made available on competing firms is as follows: project estimates, the Bid Bond, performance bond, technical specifications, BQs, and Drawings
ITT 2.4	The firms that provided consulting services for the contract being tendered for are: N/A
ITT 3.1	Maximum number of members in the Joint Venture (JV) shall be: Three (3)
B. Contents of Tender Document	
ITT 7.1	(i) The Tenderer will submit any request for clarifications in writing at the Address procurement@transnzoia.go.ke or supplychain.transnzoia@gmail.com to reach the Procuring Entity not later than, midnight, 03.11.2026 (ii) The Procuring Entity will publish its response at the website: www.transnzoia.go.ke
ITT 7.2	(A) A pre-arranged pretender site visit *shall* take place at the following date, time and place: Date: 03.11.2026 Time: 9.00am Place: Kenyatta Stadium Kitale (B) Pre-Tender meeting *shall not* take place
ITT 7.3	The Tenderer will submit any questions in writing, to reach the Procuring Entity not later than 2nd November, 2026 before the meeting.
ITT 7.5	The Procuring Entity's website where Minutes of the pre-Tender meeting and the pre-arranged pretender will be published is www.transnzoia.go.ke
ITT 9.1	For Clarification of Tender purposes, for obtaining further information and for purchasing tender documents, the Procuring Entity's address is: (1) Name of Procuring Entity County Government of Trans Nzoia (2) Physical address for hand Courier Delivery to an office or Tender Box: County Headquarters next to Kitale Police Station (3) Postal Address: P.O Box 4211 – 30200 Kitale (4) Email: supplychain.transnzoia@gmail.com or procurement@transnzoia.go.ke , Attention Director Procurement
C. Preparation of Tenders	
ITT 11.1 (h)	The Tenderer shall submit the following additional documents in its Tender: as indicated in section III under qualification requirements.
ITT 13.1	Alternative Tenders *shall not be* considered.
ITT 13.2	Alternative times for completion *shall not be* permitted.
ITT 13.4	Alternative technical solutions shall be permitted for the following parts of the Works: N/A
ITT 14.5	The prices quoted by the Tenderer shall be: *fixed*
ITT 15.2 (a)	Foreign currency requirements **not allowed.**
ITT 18.1	The Tender validity period shall be 182 days.

ITT 18.3	a) The Number of days beyond the expiry of the initial tender validity period will be 30 days. (b) The Tender price shall be adjusted by the following percentages of the tender price: N/A
ITT 19.1	Tender shall provide **a Tender Security** The type of Tender security shall be Kes.6,000,000/= (Kenya shillings six million only)
ITT 20.1	In addition to the original of the Tender, the number of copies is: one (1)
ITT 20.3	The written confirmation of authorization to sign on behalf of the Tenderer shall consist of: Power of Attorney
D. Submission and Opening of Tenders	
ITT 22.1	(A) For Tender submission purposes only, the Procuring Entity's address is: (1) **Name of Procuring Entity:** County Government of Trans Nzoia (2) **Postal Address:** P.O Box 4211 – 30200 Kitale (Attn: Head of Procurement) (3) Kitale Town; Fire Station (County Yard – Behind Kitale Police Station), County Supply Chain Management Offices, Room One (1) (4) Date and time for submission of Tenders: **10th November, 2026, at 11.00am** (5) Tenders shall **shall not submit** tenders electronically.
ITT 25.1	The Tender opening shall take place at the time and the address for Opening of Tenders provided below: (1) **Name of Procuring Entity:** County Government of Trans Nzoia (2) Physical Address: Kitale Town; Fire Station (County Yard – Behind Kitale Police Station), County Supply Chain Management Offices, Board Room Date and time for submission of Tenders: **10th November, 2026, at 11.00am**
ITT 25.1	If Tenderers are allowed to submit Tenders electronically, they shall follow the electronic tender submission procedures **specified below: N/A**
E. Evaluation, and Comparison of Tenders	
ITT 30.3	The adjustment shall be based on the *average* price of the item or component as quoted in other substantially responsive Tenders. If the price of the item or component cannot be derived from the price of other substantially responsive Tenders, the Procuring Entity shall use its best estimate.
TT 32.1	The currency that shall be used for Tender evaluation and comparison purposes only to convert at the selling exchange rate all Tender prices expressed in various currencies into a single currency is: Kenya shillings The source of exchange rate shall be: **The Central bank of Kenya** (mean rate) The date for the exchange rate shall be: **the deadline date for Submission of the Tenders.** *For comparison of Tenders, the Tender Price, corrected pursuant to ITT 31, shall first be broken down into the respective amounts payable in various currencies by using the selling exchange rates specified by the Tenderer in accordance with ITT 15.1.* *In the second step, the Procuring Entity will convert the amounts in various currencies in which the Tender Price is payable (excluding Provisional Sums but including Daywork where priced competitively) to the single currency identified above at the selling rates established for similar transactions by the authority specified and, on the date, stipulated above.*
ITT 33.2	A margin of preference *shall not* apply.
ITT 33.4	The invitation to tender is extended to the following group that qualify for Reservations: N/A
ITT 34.1	At this time, the Procuring Entity *does not intend* to execute certain specific parts of the Works by subcontractors selected in advance.
ITT 34.2	Contractor's may propose subcontracting: Maximum percentage of subcontracting permitted is: *10% of the total contract amount.* Tenderers planning to subcontract more than 10% of total volume of work shall specify, in the Form of Tender, the activity (ies) or parts of the

	Works to be subcontracted along with complete details of the subcontractors and their qualification and experience.
ITT 34.3	The parts of the Works for which the Procuring Entity permits Tenderers to propose Specialized Subcontractors are designated as follows: Electrical Works Mechanical works For the above-designated parts of the Works that may require Specialized Subcontractors, the relevant qualifications of the proposed Specialized Subcontractors will be added to the qualifications of the Tenderer for the purpose of evaluation.
ITT 35.2 (e)	Additional requirements apply. These are detailed in the evaluation criteria in Section III, Evaluation and Qualification Criteria.
ITT 48.1	Other documents required in addition to the Performance Security are: as per section III evaluation and qualification criteria
ITT 50.1	The procedures for making a Procurement-related Complaints are detailed in the "Regulations" available from the PPRA Website www.ppra.go.ke or email complaints@ppra.go.ke. If a Tenderer wishes to make a Procurement-related Complaint, the Tenderer should submit its complaint following these procedures, in writing (by the quickest means available, that is either by hand delivery or email to: **For the attention:** *Director* **Title/position:** *Head of Procurement Function* **Procuring Entity:** *County Government of Trans Nzoia* **Email address:** info@transnzoia.go.ke and/or procurement@transnzoia.go.ke In summary, a Procurement-related Complaint may challenge any of the following: (i) the terms of the Tender Documents; and (ii) the Procuring Entity's decision to award the contract.

SECTION III - EVALUATION AND QUALIFICATION CRITERIA

1.0 GENERAL PROVISIONS

1.1 This section contains the criteria that the Employer shall use to evaluate tender and qualify tenderers. No other factors, methods or criteria shall be used other than specified in this tender document. The Tenderer shall provide all the information requested in the forms included in Section IV, Tendering Forms. The Procuring Entity shall use the Standard Tender Evaluation Document for Goods and Works for evaluating Tenders.

1.2 Wherever a Tenderer is required to state a monetary amount, Tenderers should indicate the Kenya Shilling equivalent using the rate of exchange determined as follows:

a) For construction turnover or financial data required for each year - Exchange rate prevailing on the last day of the respective calendar year (in which the amounts for that year is to be converted) was originally established.

b) Value of single contract - Exchange rate prevailing on the date of the contract signature.

(a) Exchange rates shall be taken from the publicly available source identified in the ITT 14.3. Any error in determining the exchange rates in the Tender may be corrected by the Procuring Entity.

1.3 EVALUATION AND CONTRACT AWARD CRITERIA

TheProcuring Entity shall use the criteria and methodologies listed in this Section to evaluate tenders and arrive at the Lowest Evaluated Tender. The tender that(i) meets the qualification criteria, (ii) has been determined to be substantially responsive to the Tender Documents, and (iii) is determined to have the Lowest Evaluated Tender price shall be selected for award of contract.

2.0 PRELIMINARY EXAMINATION FOR DETERMINATION OF RESPONSIVENESS Preliminary examination for Determination of Responsiveness

The Procuring Entity will start by examining all tenders to ensure they meet in all respects the eligibility criteria and other mandatory requirements in the ITT, and that the tender is complete in all aspects in meeting the requirements provided for in the preliminary evaluation criteria outlined below. The Standard Tender Evaluation Report Document for Goods and Works for evaluating Tenders provides very clear guide on how to deal with review of these requirements. Tenders that do not pass the Preliminary Examination will be considered non- responsive and will not be considered further.

After tender opening, the tenders will be evaluated in four stages as follows.

Stage 1: Compliance with Mandatory Requirements. Only candidates who meet the mandatory requirements will be subjected to technical evaluation.

No	**Requirements**	Tenderer's Responsive or not responsive
MR 1	Provide documentary evidence of the Candidate's Company Certificate of Incorporation/ Compliance in Kenya from the Registrar of Companies. The certificate MUST be certified by a commissioner of oaths as a true copy of the original.	
MR 2	Provide documentary evidence of the Candidate's CR-12 from the Registrar of Companies. The certificate MUST be certified by a commissioner of oaths as a true copy of the original.	

MR 3	Provide documentary evidence of the Candidate's Business Permit in Kenya. The certificate MUST be certified by a commissioner of oaths as a true copy of the original.	
MR 4	Provide documentary evidence of the Company's valid registration by National Construction Authority as a Building Works Contractor Category NCA 1 - NCA 2. The certificate MUST be certified by a commissioner of oaths as a true copy of the original.	
MR 5	Provide documentary evidence of the Company's valid annual practicing license from the National Construction Authority as a Building Works Contractor Category NCA 1 - NCA 2. The certificate MUST be certified by a commissioner of oaths as a true copy of the original.	
MR 6	Provide documentary evidence of the Company's or Domestic Sub-Contractor valid registration by National Construction Authority as an Electrical Works Contractor Category NCA 1 – NCA 2. Provide letter of agreement between the Main Contractor and the Domestic Sub-Contractor where applicable. The certificate MUST be certified by a commissioner of oaths as a true copy of the original.	
MR 7	Provide documentary evidence of the Company's or Domestic Sub-Contractor valid annual practicing license by National Construction Authority as a Electrical Works Contractor Category NCA 1 – NCA 2 . The certificate MUST be certified by a commissioner of oaths as a true copy of the original.	
MR 8	Provide documentary evidence of the Company's or Domestic Sub-Contractor EPRA Licence Class A1. The certificate MUST be certified by a commissioner of oaths as a true copy of the original.	
MR 9	Provide a valid copy of the Company's current Certificate of Tax Compliance issued by Kenya Revenue Authority (KRA). The certificate MUST be valid on the closing date of the applications. The certificate MUST be certified by a commissioner of oaths as a true copy of the original.	
MR 10	Provide documentary evidence in form of Audited Accounts for the Company for at least three (3) consecutive years (2025,2024,2023) to indicate the Company has had an annual turnover of Kenya Shillings Twenty Million (Kshs. 100 Million) and above in each of the three years. The audited accounts MUST be signed by the auditor preparing the audited accounts and the candidate's Company Director(s). The following documents must be provided: A certified copy of the professional registration certificate of the auditor The Candidate MUST provide an active email and telephone number of both the auditor and the auditing firm.	
MR11	Provide documentary evidence of having liquid cash in the bank net of any advance payments, of at least Kenya Shillings fifty Million (Kshs. 50 Million). The funds are supposed to prove that such amounts are available solely for this project if the project is	

	awarded to the Candidate. Attach bank statements for the last three months from your bank(s) as proof of availability of these funds. The bank statements MUST be certified by the issuing bank(s). The documents so provided may be verified for authenticity. To facilitate the authentication process, the Candidate MUST attach letters authorizing their respective bank(s) to confirm that the bank statements are genuine when presented to them for verification by the procuring entity.	
MR 12	Candidates MUST provide evidence that the Company has been operating in Kenya as an ACTIVE building construction works Company between and including 2021 to 2025, evidenced by project(s) undertaken during that period. For the five years to qualify, the Candidate MUST show evidence of active works undertaken during each year. The project(s) submitted to prove activity in each of the five years to have a minimum value of not less than Kenya Shillings Two hundred Million (Kshs. 200 Million). The Candidate MUST provide the following as proof of works done in each of the five years: a. Provide evidence from National Construction Authority (NCA) / Ministry of Public Works (MOPW) of having been registered to practice as a building works contractor for the past at least last five years. b. Contractor-Client construction contract agreements showing the contract sum, contract period, commencement and completion dates, and approved extensions of contract periods showing the revised completion period where applicable. c. Active email and telephone numbers of the Client and Lead Consultant and their respective contact persons MUST be provided. The information so provided may be verified for authenticity. All the copies issued MUST be certified by a commissioner of oaths as true copies of the original.	
MR 13	Provide documentary evidence of having undertaken (completed or under construction) at least four number (4 no.) building construction works that MUST meet the following criteria: a. Each of the four projects having been commenced within the last five (5) years. b. Each of the four projects MUST be valued at over Kenya Shillings Two hundred Million (Kshs.200 Million). As proof of the cost of the project, the Candidates MUST submit for each of the projects, copies of construction contract agreements. The copies submitted MUST indicate the project name, Client name, project scope, project cost, project Lead Consultant and the commencement date and project period. The copies MUST be certified by a commissioner of oaths as true copies of the original. c. At least one of the four projects MUST be 100% complete and occupied. The project that is 100% complete MUST be proven by providing the following documents: Contract agreement between Contractor and	

	Client, Practical completion certificates or handing over certificates or photographic evidence. All the documents issued above MUST be certified as true copies of the original by a commissioner of oaths.	
MR 14	Submit a completed Confidential Business Questionnaire as specified in Section V of this document. For the submitted Confidential Business Questionnaire to qualify, it MUST be in the format provided in this application document.	
MR15	Provide Tender Security of Kes.6,000,000/= (Kenya shillings six million only) from bank or an insurance company approved by the Public Procurement Regulatory Authority. Valid for 182 days after the date of tender opening.	
MR16	Submit duly filled tender documents in the format provided. The document must not be edited to include new content not in the original tender document or exclude any material that is in the original tender document.	
MR17	Submit duly filled and signed pre-tender site visit certificate. The document must be an original one as issued during the visit and attached on original tender document.	
MR18	Submission of the document numbered in the correct sequence including all appendixes and attachments. All pages must be paginated. Bidders must provide a statement of how many pages their document has.	
MR14	Submission of a firmly bound document that has no any loose pages. Spiral binding and files (Box and Springs) are not acceptable.	

Bidders shall be required to meet all Mandatory Requirements to progress to stage 2 of the evaluation on Technical Evaluation (Capacity to Deliver the Services).

Stage 2: The Technical Evaluation (Capacity to perform the contract).

Tenderers fully complying with mandatory requirements will be subjected to technical evaluation on capacity to perform the contract based on the technical parameters given below:

No	Evaluation Aspect	Max Points	Points Scored
1	**Work Experience** Evidence that the Company has been operating in Kenya as an active building construction works Company between and including 2021 to 2025 evidenced by projects undertaken. For any of the years to qualify, the Candidate MUST show evidence of active works undertaken during each year. The Candidate MUST provide the following as proof of works done in each of the five years: a. Provide evidence from National Construction Authority (NCA)/ Ministry of Public Works (MOPW) of having been registered to practice as a building works Contractor for the past at least five years. b. Contractor-Client construction contract agreements showing commencement and completion dates and approved extensions of	8	

	contract periods showing the revised completion period where applicable. *Each year to score 2 marks to a maximum of 4 years.*		
2	**Qualified and relevant technical staff** The Candidate to submit at least three (3) qualified and experienced technical staff in the Company relevant to the building construction industry who will be actively involved in the proposed project. For any of the personnel provided to qualify, the following requirements MUST be met: a. As a minimum, the academic qualifications of each of the personnel MUST be a degree from a recognized university in any of the following fields; I. Civil and/or Structural Engineering. II. Electrical and/or Mechanical Engineering. III. Quantity Surveying . IV. Architecture. V. Construction Management. VI. Building Technology. VII. Any other building construction related field. b. At least one of the personnel given MUST be from different fields but within the fields listed above. c. All the staff provided MUST have as a minimum five years' post university experience in active building construction. Each personnel MUST indicate the firms he/she has worked in since graduation. d. Detailed Curriculum Vitae (CV's) of each staff MUST be attached. The Curriculum Vitae MUST state qualification, experience, and duration with the firm and active contacts of the staff. The Curriculum Vitae MUST be signed by the owner and a director of the firm. The contacts given in the Curriculum Vitae MUST be active email addresses. e. Copies of academic certificates for each of the Curriculum Vitae submitted MUST be attached. All certificates provided MUST be certified as true copies of the original by a commissioner of oaths. The personnel so provided may be contacted to verify the information given. Any personnel who would not have responded to enquiries being made within five days from the day of being contacted by either e-mail or phone call will have their Curriculum Vitae disqualified. *Each qualifying technical staff to score 3 marks, to a maximum of 3 staff*	9	
3	**Qualified and relevant management staff** The Candidate to submit at least two (2) Qualified Management/ Administrative Staff in the Company relevant to business management and administration who will be actively involved in the proposed project. For any of the personnel provided to qualify, the following qualifications MUST be met; a. As a minimum, the academic qualifications of each of the personnel MUST be a degree from a recognized University in any of the following fields; • Commerce • Business Management/ Administration • Project Management • Construction Management • Any other business management and administration related fields	8	

	b. All the staff provided MUST have as a minimum five years' post university experience in active building construction. Each personnel MUST indicate the firms he/she has worked in since graduation. c. Detailed Curriculum Vitae (CV's) of each staff MUST be attached. The Curriculum Vitae MUST state qualification, experience, and duration with the firm and active contacts of the personnel. The Curriculum Vitae MUST be signed by the owner and a director of the firm. The contacts given in the Curriculum Vitae MUST be active email addresses. d. Copies of academic certificates for each of the Curriculum Vitae MUST be attached. All certificates provided MUST be certified as true copies of the original by a commissioner of oaths. The personnel so provided may be contacted to verify the information given. Any personnel who would not have responded to enquiries being made within five days from the day of being contacted by either e-mail or phone call will have their Curriculum Vitae disqualified. *Each qualifying management staff to score 4 marks, to a maximum of 2 staff*		
4	**Qualifications of the company directors** The Candidate to provide evidence that the Company director(s) have technical qualifications in a construction related field with a minimum Diploma from a recognized institution. The Curriculum Vitae and copies of academic certificates of the Director(s) MUST be attached in the format provided. All academic certificates provided MUST be certified as true copies of the original by a commissioner of oaths. Proof of directorship in the Company to be provided in form of a certified copy of the Memorandum and Articles of Association and evidence of appointment as director(s) by the shareholders. The documents so provided may be verified for authenticity. *Each qualifying director to score 4 marks to a maximum of 2 directors.*	8	
5	**Proposed construction period for the project** Candidates MUST submit their proposed construction period for the project which must be accompanied by a works programme chart. The proposed works programme must be practical and specific to the project. *3 marks to be awarded for the construction period,* *3 marks for the works programme chart.* *To be evaluated on its practicality and marks to be prorated amongst Candidates.*	6	
6	**Contracts completed in the last 10 years of over 200M (max of 5 No. projects)** (Provide copy of contract, completion certificates and letter of recommendation.) • Projects of similar nature, complexity and magnitude. *Each project to score 4 marks to a maximum of 5 projects*	20	
7	**Ongoing projects of over 200M (max of 2 No. projects)** (Provide copy of contract, award letter and letter of reference from client.) • Projects of similar nature, complexity and magnitude. *Each project to score 5 marks to a maximum of 2 projects.*	10	
8	**Schedules of contractor's equipment** (Attach evidence of proof of ownership or lease agreements) Each specific equipment required in the construction work being tendered to score 2 marks to a maximum of 3 equipment.	6	

9	**Audited financial report (last 3 years)** • Turnover greater or equal to 5 times the cost of the project ..... 10 • Turnover greater or equal to 3 times the cost of the project.....5 • Turnover greater or equal to the cost of the project.....4 • Turnover below the cost of the project 0	10	
10	**Candidate's Insurance Policies.** The Candidate to give certified copies of their current Insurance Policies. These should include any of the following: I. Workers insurance (WIBA) II. Plant, machinery and equipment insurance III. Third Party insurance IV. Employer's liability insurance V. Contractor's all risks policy *Each Insurance Policy to score 4 marks to a maximum of 2 Policies.*	8	
11	Candidate's compliance with NSSF and NHIF. Provide certified registration letter and compliance certificate from both NSSF and NHIF. *Each certificate/letter to score 2 mark to a maximum of 4 marks.*	4	
12	Candidate's participation in relevant training programs. The candidate to provide evidence in form of training certificates of undertaking regular staff training programs for capacity building within the construction industry. *No training to earn 0 mark, training to earn 1 mark, variety of training programs to earn 3 marks*	3	
	TOTAL	100	

Only candidates who attain a minimum score of 75% and above in the technical evaluation as per the criteria shall proceed to Financial Evaluation.

Stage 3: The Financial Evaluation (Quoted Prices).

Tenderers that score 75% and above under Technical Evaluation on capacity to perform the contract will have their bids subjected to financial evaluation.

Financial evaluation shall involve

a. Checking arithmetic errors.
b. Comparison of rates from different bidders to determine items that are underpriced, overpriced and front loading.
c. Consistency of the rates by comparing rates of similar items in the tenderers bid.

Stage 4: Due diligence and Recommendation for Award.

3.0 TENDER EVALUATION (ITT 35)

Price evaluation: in addition to the criteria listed in ITT 35.2 (a) – (d) the following criteria shall apply: N/A

(i) Alternative Completion Times, if permitted under ITT13.2, will be evaluated as follows: N/A

(ii) Alternative Technical Solutions for specified parts of the Works, if permitted under ITT 13.4, will be evaluated as follows: N/A

(iii) Other Criteria; if permitted under ITT 35.2(j): N/A

4.0 MULTIPLE CONTRACTS

4.1 Multiple contracts will be permitted in accordance with ITT 35.4. Tenderers are evaluated on basis of Lots and a lowest evaluated tenderer identified for each Lot. The Procuring Entity will select one Option of the two Options listed below for award of Contracts.

OPTION 1

(i) If a tenderer wins only one Lot, the tenderer will be awarded a contract for that Lot, provided the tenderer meets the Eligibility and Qualification Criteria for that Lot.

(ii) If a tenderer wins more than one Lot, the tender will be awarded a contract for all won Lots, provided the tenderer meets the aggregate Eligibility and Qualification Criteria for all the won Lots. The tenderer will be awarded only the combinations for which the tenderer qualifies and the others will be considered for award to second lowest the tenderers.

OPTION2

The Procuring Entity will consider all possible combinations of won Lots [contract(s)] and determine the combination with the lowest evaluated price. Tenders will then be awarded to the Tenderer or Tenderers in the combination provided the tenderer meets the aggregate Eligibility and Qualification Criteria for all the won Lots.

5.0 ALTERNATIVE TENDERS (ITT 13.1)

Alternative Tenders (ITT 13.1)

An alternative if permitted under ITT 3.1, will be evaluated as follows:

The Procuring Entity shall consider Tenders offered for alternatives as specified in Part 2 - Works requirements. Only the technical alternatives, if any, of the Tenderer with the Best Evaluated Tender conforming to the basic technical requirements shall be considered by the Procuring Entity.

6.0 MARGIN OF PREFERENCE

6.1 If the TDS so specifies, the Procuring Entity will grant a margin of preference of fifteen percent (15%) to be loaded on evaluated prices of the foreign tenderers, where the percentage of share holding of Kenyan citizensis less than fifty- one percent (51%).

6.2 Contractors shall be asked to provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by the Procuring Entity, a particular contractor or group of contractors qualifies for a margin of preference.

6.3 After Tenders have been received and reviewed by the Procuring Entity, responsive Tenders shall be assessed to ascertain their percentage of shareholding of Kenyan citizens. Responsive tenders shall be classified into the following groups:

i) Group A: tenders offered by Kenyan Contractors and other Tenderers where Kenyan citizens hold shares of over fifty one percent (51%).

ii) Group B: tenders offered by foreign Contractors and other Tenderers where Kenyan citizens hold shares of less than fifty one percent (51%).

6.4 All evaluated tenders in each group shall, as a first evaluation step, be compared to determine the lowest tender, and the lowest evaluated tender in each group shall be further compared with each other. If, as a result of this comparison, a tender from Group A is the lowest, it shall be selected for the award of contract. If a tender from Group B is the lowest, an amount equal to the percentage indicated in Item 6.1 of the respective tender price, including unconditional discounts and excluding provisional sums and the cost of day works, if any, shall be added to the evaluated price offered in each tender from Group B. All tenders shall then be compared using new prices with added prices to Group B and the lowest evaluated tender from Group A. If the tender from Group A is still the lowest tender, it shall be selected for award. If not, the lowest evaluated tender from Group B based on the first evaluation price shall be selected.

7. Post qualification and Contract ward (ITT 39), more specifically,

a) In case the tender was subject to post-qualification, the contract shall be awarded to the lowest evaluated tenderer, subject to confirmation of pre-qualification data, if so required.

b) In case the tender was not subject to post-qualification, the tender that has been determined to be the lowest evaluated tenderer shall be considered for contract award, subject to meeting each of the following conditions.

i) The Tenderer shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow of Kenya Shillings: as indicated in 2.0 under preliminary evaluation.

ii) Minimum average annual construction turnover of Kenya Shillings as indicated in 2.0 under preliminary evaluation, equivalent calculated as total certified payments received for contracts in progress and/or completed within the last five (5) years.

iii) At least (- no. of contract(s) of a similar nature executed within Kenya, or the East African Community or a broad, that have been satisfactorily and substantially completed as a prime contractor, or joint venture member or sub-contractor each of minimum value Kenya shillings equivalent (as indicated in 2.0 under preliminary evaluation).

iv) Contractor's Representative and Key Personnel, which are specified as indicated in 2.0 under preliminary evaluation

v) Contractors key equipment listed on the table “Contractor's Equipment” below and more specifically listed as indicated in 2.0 under preliminary evaluation.

iv) Other conditions depending on their seriousness.

a) History of non-performing contracts:

Tenderer and each member of JV in case the Tenderer is a JV, shall demonstrate that non-performance of a contract did not occur because of the default of the Tenderer, or the member of a JV in the last (specify years). The required information shall be furnished in the appropriate form.

b) Pending Litigation

Financial position and prospective long-term profit ability of the Single Tenderer, and in the case the Tenderer is a JV, of each member of the JV, shall remain sound according to criteria established with respect to Financial Capability under Paragraph (i) above if all pending litigation will be resolved against the Tenderer. Tenderer shall provide information on pending litigations in the appropriate form.

c) Litigation History

There shall be no consistent history of court/arbitral award decisions against the Tenderer, in the last 5 years. All parties to the contract shall furnish the information in the appropriate form about any litigation or arbitration resulting from contracts completed or on going under its execution over the years specified. A consistent history of awards against the Tenderer or any member of a JV may result in rejection of the tender.

8. QUALIFICATION FORM SUMMARY

1	2	3	*4*	*5*
Item No.	**Qualification Subject**	**Qualification Requirement**	***Document To be Completed by Tenderer***	***For Procuring Entity's Use (Qualification met or Not Met)***
1	Nationality	Nationality in accordance with ITT 3.6	Forms ELI – 1.1 and 1.2, with attachments	
2	Tax Obligations for Kenyan Tenderers	Has produced a current tax clearance certificate or tax exemption certificate issued by Kenya Revenue Authority in accordance with ITT 3.14.	Attachment	
3	Conflict of Interest	No conflicts of interest in accordance with ITT 3.3	Form of Tender	
4	PPRA Eligibility	Not having been declared ineligible by the PPRA as described in ITT 3.7	Form of Tender	
5	State- owned Enterprise	Meets conditions of ITT 3.8	Forms ELI – 1.1 and 1.2, with attachments	
6	Goods, equipment and services to be supplied under the contract	To have their origin in any country that is not determined ineligible under ITT 4.1	Forms ELI – 1.1 and 1.2, with attachments	
7	History of Non-Performing Contracts	Non-performance of a contract did not occur as a result of contractor default since 1st January 2017.	Form CON-2	
8	Suspension Based on Execution of Tender/Proposal Securing Declaration by the Procuring Entity	Not under suspension based on-execution of a Tender/Proposal Securing Declaration pursuant to ITT 19.9	Form of Tender	
9	Pending Litigation	Tender's financial position and prospective long-term profitability still sound according to criteria established in 3.1 and assuming	Form CON – 2	

		that all pending litigation will NOT be resolved against the Tenderer.		
10	Litigation History	No consistent history of court/arbitral award decisions against the Tenderer since 1st January *2017*.	Form CON – 2	
11	Financial Capabilities	(i) The Tenderer shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as Kenya Shillings *fifty million* equivalent for the subject contract(s) net of the Tenderer's other commitments. (ii) The Tenderers shall also demonstrate, to the satisfaction of the Procuring Entity, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments. (iii) The audited balance sheets or, if not required by the laws of the Tenderer's country, other financial statements acceptable to the Procuring Entity, for the last *Three (3)* years shall be submitted and must demonstrate the current soundness of the Tenderer's financial position and indicate its prospective long-term profitability.	Form FIN – 3.1, with attachments	
12	Average Annual Construction Turnover	Minimum average annual construction turnover of Kenya Shillings *two hundred million*, equivalent calculated as total certified payments received for contracts in progress and/or completed within the last *three (3)* years, divided by three (3) years	Form FIN – 3.2	
13	General Construction Experience	Experience under construction contracts in the role of prime contractor, JV member, sub-contractor, or management contractor for at least the last ten (10) years, starting 1st January 2012.	Form EXP – 4.1	

14	Specific Construction & Contract Management Experience	A minimum number of *five (4)* similar contracts specified below that have been satisfactorily and substantially completed as a prime contractor, joint venture member, management contractor or sub-contractor between 1st January 2021 and tender submission deadline i.e. 4 contracts, each of minimum value Kenya shillings two hundred (200,000) million equivalent. The similarity of the contracts shall be based on the following: Building Works	Form EXP 4.2(a)	

SECTION IV - TENDERING FORMS

QUALIFICATION FORMS

1. FOREIGN TENDERERS 40%RULE.
2. TENDERER'S ELIGIBILITY- CONFIDENTIAL BUSINESS QUESTIONNAIRE
3. Form EQU: EQUIPMENT.
4. FORM PER -1.
5. FORM PER-2.
6. TENDERERS QUALIFICATION WITHOUT PRE-QUALIFICATION.

6.1 FORM ELI-1.1.
6.2 FORM ELI-1.2.
6.3 FORM CON –2.
6.4 FORM FIN –3.1.
6.5 FORM FIN –3.2.
6.6 FORM FIN –3.3.
6.7 FORM FIN –3.4.
6.8 FORM EXP -4.1.
6.9 FORM EXP - 4.2(a).
6.9 FORM EXP - 4.2 (a) (cont.).
6.10 FORM EXP -4.2 (b).

OTHER FORMS

7. FORM OF TENDER.
8. FORM OF TENDER SECURITY - DEMAND BANKGUARANTEE.
9. FORM OF TENDER SECURITY (TENDERBOND).
10. FORM OF TENDER-SECURINGDECLARATION.
11. APPENDIX TO TENDER

TECHNICAL PROPOSAL FORMS

Site Organization.
Method Statement.
Mobilization Schedule.
Construction Schedule.

QUALIFICATION FORMS

1. FOREIGN TENDERERS 40% RULE

Pursuant to ITT 3.9, a foreign tenderer must complete this form to demonstrate that the tender fulfils this condition.

ITEM	Description of Work Item	Describe location of Source	COST in K. shillings	Comments, if any
A	**Local Labor**			
1				
2				
3				
4				
5				
B	**Sub contracts from Local sources**			
1				
2				
3				
4				
5				
C	**Local materials**			
1				
2				
3				
4				
5				
D	**Use of Local Plant and Equipment**			
1				
2				
3				
4				
5				
E	Add any other items			
1				
2				
3				
4				
5				
6				
	TOTAL COST LOCAL CONTENT		XXXXX	
	PERCENTAGE OF CONTRACT PRICE		Xxxx	

2. TENDERER'S ELIGIBILITY-CONFIDENTIAL BUSINESS

QUESTIONNAIRE Instruction to Tenderer

Tender is instructed to complete the particulars required in this Form, *one form for each entity if Tender is a JV.* Tenderer is further reminded that it is an offence to give false information on this Form.

i) Tenderer's details

	ITEM	**DESCRIPTION**
1	Name of the Procuring Entity	
2	Reference Number of the Tender	
3	Date and Time of Tender Opening	
4	Name of the Tenderer	
5	Full Address and Contact Details of the Tenderer.	1. Country 2. City 3. Location 4. Building 5. Floor 6. Postal Address 7. Name and email of contact person.
6	Current Trade License Registration Number and Expiring date	
7	Name, country and full address (*postal and physical addresses, email, and telephone number*) of Registering Body/Agency	
8	Description of Nature of Business	
9	Maximum value of business which the Tenderer handles.	
10	State if Tenders Company is listed in stock exchange, give name and full address (*postal and physical addresses, email, and telephone number*) of state which stock exchange	

General and Specific Details

ii) **Sole Proprietor,** provide the following details.

Name in full_____

Age _____ Nationality_____Country of Origin_____

Citizenship _____

iii) **Partnership,** provide the following details.

	Names of Partners	**Nationality**	**Citizenship**	**% Shares owned**
1				
2				
3				

iv) **Registered Company,** provide the following details.

i) Private or public Company _____
ii) State the nominal and issued capital of the Company_____

Nominal Kenya Shillings (Equivalent).....
Issued Kenya Shillings (Equivalent).....

iii) Give details of Directors as follows.

	Names of Director	**Nationality**	**Citizenship**	**% Shares owned**
1				
2				
3				

v) DISCLOSURE OF INTEREST - Interest of the Firm in the Procuring Entity.

i) Are there any person/persons in……
(*Name of Procuring Entity)* who has/have an interest or relationship in this firm?
Yes/No……

If yes, provide details as follows.

	Names of Person	**Designation in the Procuring Entity**	**Interest or Relationship with Tenderer**
1			
2			
3			

ii) Conflict of interest disclosure

	Type of Conflict		**Disclosure YES OR NO**	**If YES provide details of the relationship with Tenderer**
1	Tenderer is directly or indirectly controls, is controlled by or is under common control with another tenderer.			

	Type of Conflict		Disclosure YES OR NO	If YES provide details of the relationship with Tenderer
2	Tenderer receives or has received any direct or indirect subsidy from another tenderer.			
3	Tenderer has the same legal representative as another tenderer			
4	Tender has a relationship with another tenderer, directly or through common third parties, that puts it in a position to influence the tender of another tenderer, or influence the decisions of the Procuring Entity regarding this tendering process.			
5	Any of the Tenderer's affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the tender.			
6	Tenderer would be providing goods, works, non-consulting services or consulting services during implementation of the contract specified in this Tender Document.			
7	Tenderer has a close business or family relationship with a professional staff of the Procuring Entity who are directly or indirectly involved in the preparation of the Tender document or specifications of the Contract, and/or the Tender evaluation process of such contract.			
8	Tenderer has a close business or family relationship with a professional staff of the Procuring Entity who would			

	Type of Conflict		Disclosure YES OR NO	If YES provide details of the relationship with Tenderer
	be involved in the implementation or supervision of the such Contract.			
9	Has the conflict stemming from such relationship stated in item 7 and 8 above been resolved in a manner acceptable to the Procuring Entity throughout the tendering process and execution of the Contract.			

Certification

On behalf of the Tenderer, I certify that the information given above is complete, current and accurate as at the date of submission.

Full Name_____

Title or Designation_____

_____ _____

(Signature) *(Date)*

3. FORM EQU: EQUIPMENT

The Tenderer shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III, Evaluation and Qualification Criteria. A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Tenderer.

Item of equipment		
Equipment information	Name of manufacturer	Model and power rating
	Capacity	Year of manufacture
Current status	Current location	
	Details of current commitments	
Source	Indicate source of the equipment ☐ Owned ☐ Rented ☐ Leased ☐ Specially manufactured	

Submit the following information for equipment not owned by the Tenderer.

Owner	Name of owner	
	Address of owner	
	Telephone	Contact name and title
	Fax	Telex
Agreements	Details of rental / lease / manufacture agreements specific to the project	

4. FORM PER-1

Contractor's Representative and Key Personnel Schedule

Tenderers should provide the names and details of the suitably qualified Contractor's Representative and Key Personnel to perform the Contract. The data on their experience should be supplied using the Form PER-2 below for each candidate.

Contractor' Representative and Key Personnel.

1.	**Title of position:** Contractor's Representative	
	Name of candidate:	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]
	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
2. 2.	**Title of position:** *[_____]*	
	Name of candidate:	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]
	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
3. 3.	**Title of position:** *[_____]*	
	Name of candidate:	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]
	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
4. 4.	**Title of position:** *[_____]*	
	Name of candidate:	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment:	[*insert the number of days/week/months/ that has been scheduled for this position*]

	for this position:	
	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]
	Title of position: *[insert title]*	
5.	**Name of candidate**	
	Duration of appointment:	[*insert the whole period (start and end dates) for which this position will be engaged*]
	Time commitment: for this position:	[*insert the number of days/week/months/ that has been scheduled for this position*]
	Expected time schedule for this position:	[*insert the expected time schedule for this position (e.g. attach high level Gantt chart*]

5. FORM PER-2:

Resume and Declaration - Contractor's Representative and Key Personnel

Name of Tenderer

Position [#1]: [*title of position from Form PER-1*]		
Personnel information	Name:	Date of birth:
	Address:	E-mail:
	Professional qualifications:	
	Academic qualifications:	
	Language proficiency: *[language and levels of speaking, reading and writing skills]*	
Details		
	Address of Procuring Entity:	
	Telephone:	Contact (manager / personnel officer):
	Fax:	
	Job title:	Years with present Procuring Entity:

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

Project	**Role**	**Duration of involvement**	**Relevant experience**
[main project details]	***[role and responsibilities on the project]***	***[time in role]***	***[describe the experience relevant to this position]***

DECLARATION

I, the under signed [insert either "Contractor's Representative" or "Key Personnel" as applicable], certify that to the Lowest of my knowledge and belief, the information contained in this Form PER-2 correctly describes myself, my qualifications and my experience.

I confirm that I am available as certified in the following table and throughout the expected time schedule for this position as provided in the Tender:

Commitment	**Details**
Commitment to duration of contract:	*[insert period (start and end dates) for which this Contractor's Representative or Key Personnel is available to work on this contract]*
Time commitment:	*[insert period (start and end dates) for which this Contractor's Representative or Key Personnel is available to work on this contract]*

I understand that any misrepresentation or omission in this Form may:

a) be taken into consideration during Tender evaluation;

b) result in my disqualification from participating in the Tender;

c) result in my dismissal from the contract.

Name of Contractor's Representative or Key Personnel: [insert name]

Signature: _____

Date: (day month year): _____

Countersignature of authorized representative of the Tenderer: _____

Signature: _____

Date: (day month year): _____

6. TENDERERS QUALIFICATION WITHOUT PRE-QUALIFICATION

To establish its qualifications to perform the contract in accordance with Section III, Evaluation and Qualification Criteria the Tenderer shall provide the information requested in the corresponding Information Sheets included hereunder.

6.1 FORM ELI-1.1Tenderer Information Form

Date: _____

ITT No. and title: _____

Tenderer's name
In case of Joint Venture (JV), name of each member:
Tenderer's actual or intended country of registration: *[indicate country of Constitution]*
Tenderer's actual or intended year of incorporation:
Tenderer's legal address [in country of registration]:
Tenderer's authorized representative information' Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of original documents of ☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITT 3.6 ☐ In case of JV, letter of intent to form JV or JV agreement, in accordance with ITT 3.5 ☐ In case of state-owned enterprise or institution, in accordance with ITT 3.8, documents establishing: • Legal and financial autonomy • Operation under commercial law • Establishing that the Tenderer is not under the supervision of the Procuring Entity 2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

6.2 FORM ELI-1.2

Tenderer's JV Information Form

(To be completed for each member of Tenderer's JV)

Date: _____

ITT No. and title: _____

Tenderer's JV name:
JV member's name:
JV member's country of registration:
JV member's year of constitution:
JV member's legal address in country of constitution:
JV member's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of original documents of ☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITT 43.6. ☐ In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and that they are not under the supervision of the Procuring Entity, in accordance with ITT 3.8. 2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

6.3 FORM CON – 2

Historical Contract Non-Performance, Pending Litigation and Litigation History

Tenderer's Name: _____

Date: _____

JV Member's Name: _____

ITT No. and title: _____

Non-Performed Contracts in accordance with Section III, Evaluation and Qualification Criteria			
☐ Contract non-performance did not occur since 1st January *[insert year]* specified in Section III, Evaluation and Qualification Criteria, Sub-Factor 2.1. ☐ Contract(s) not performed since 1st January *[insert year]* specified in Section III, Evaluation and Qualification Criteria, requirement 2.1			
Year	**Non-performed portion of contract**	**Contract Identification**	**Total Contract Amount (current value, currency, exchange rate and Kenya Shilling equivalent)**
[insert year]	*[insert amount and percentage]*	Contract Identification: *[indicate complete contract name/ number, and any other identification]* Name of Procuring Entity: *[insert full name]* Address of Procuring Entity: *[insert street/city/country]* Reason(s) for nonperformance: *[indicate main reason(s)]*	*[insert amount]*
Pending Litigation, in accordance with Section III, Evaluation and Qualification Criteria			
☐ No pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3. ☐ Pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3 as indicated below.			

Year of dispute	**Amount in dispute (currency)**	**Contract Identification**	**Total Contract Amount (currency), Kenya Shilling Equivalent (exchange rate)**
		Contract Identification: _____ Name of Procuring Entity: _____ Address of Procuring Entity: _____ Matter in dispute: _____ Party who initiated the dispute: ____ Status of dispute: _____	
		Contract Identification: Name of Procuring Entity: Address of Procuring Entity: Matter in dispute: Party who initiated the dispute: Status of dispute:	

Litigation History in accordance with Section III, Evaluation and Qualification Criteria

☐ No Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4.

☐ Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4 as indicated below.

Year of award	**Outcome as percentage of Net Worth**	**Contract Identification**	**Total Contract Amount (currency), Kenya Shilling Equivalent (exchange rate)**
[insert year]	*[insert percentage]*	Contract Identification: [indicate complete contract name, number, and any other identification] Name of Procuring Entity: *[insert full name]* Address of Procuring Entity: *[insert street/city/country]* Matter in dispute: *[indicate main issues in dispute]* Party who initiated the dispute: *[indicate "Procuring Entity" or "Contractor"]* Reason(s) for Litigation and award decision *[indicate main reason(s)]*	*[insert amount]*

6.4 FORM FIN –3.1:

Financial Situation and Performance

Tenderer's Name: _____

Date: _____

JV Member's Name: _____

ITT No. and title: _____

6.4.1. Financial Data

Type of Financial information in_____ (currency)	**Historic information for previous _____*years*, _____ (amount in currency, currency, exchange rate*, USD equivalent)**				
	Year 1	Year 2	Year 3	Year 4	Year 5
Statement of Financial Position (Information from Balance Sheet)					
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

**Refer to ITT 15 for the exchange rate*

6.4.2 Sources of Finance

Specify sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.

No.	Source of finance	Amount (Kenya Shilling equivalent)
1		
2		
3		

6.4.3 Financial documents

The Tenderer and its parties shall provide copies of financial statements for _____ years pursuant Section III, Evaluation and Qualifications Criteria, Sub-factor 3.1. The financial statements shall:

a) reflect the financial situation of the Tenderer or in case of JV member, and not an affiliated entity (such as parent company or group member).

b) be independently audited or certified in accordance with local legislation.

c) be complete, including all notes to the financial statements.

d) correspond to accounting periods already completed and audited.

Attached are copies of financial statements 1 for the _____ years required above; and complying with the requirements

6.5 FORM FIN – 3.2:

Average Annual Construction Turnover

Tenderer's Name: _____

Date: _____

JV Member's Name: _____

ITT No. and title: _____

	Annual turnover data (construction only)		
Year	**Amount Currency**	**Exchange rate**	**Kenya Shilling equivalent**
[indicate year]	*[insert amount and indicate currency]*		
Average Annual Construction Turnover *			

* See Section III, Evaluation and Qualification Criteria, Sub-Factor 3.2.

6.6 FORM FIN –3.3:

Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash-flow demands of the subject contractor contracts as specified in Section III, Evaluation and Qualification Criteria.

6.7 FORM FIN–3.4:

Current Contract Commitments / Works in Progress

Tenderers and each member to a JV should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

Starting Year	Ending Year	Contract Identification	Role of Tenderer
		Contract name: _____ Brief Description of the Works performed by the Tenderer: _____ Amount of contract: _____ Name of Procuring Entity: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Tenderer: _____ Amount of contract: _____ Name of Procuring Entity: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Tenderer: _____ Amount of contract: _____ Name of Procuring Entity: _____ Address: _____	

6.8 FORM EXP -4.1

General Construction Experience

Tenderer's Name: _____

Date: _____

JV Member's Name: _____

ITT No. and title: _____

Similar Contract No.	**Information**			
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ☐	Member in JV ☐	Management Contractor ☐	Sub-contractor ☐
Total Contract Amount			**Kenya Shilling**	
If member in a JV or sub-contractor, specify participation in total Contract amount				
Procuring Entity's Name:				
Address: Telephone/fax number E-mail:				

6.9 FORM EXP -4.2(a)

Specific Construction and Contract Management Experience

Tenderer's Name: _____

Date: _____

JV Member's Name: _____

ITT No. and title: _____

Similar Contract No.	**Information**
Description of the similarity in accordance with Sub-Factor 4.2(a) of Section III:	
1. Amount	
2. Physical size of required works items	
3. Complexity	
4. Methods/Technology	
5. Construction rate for key activities	
6. Other Characteristics	

6.10 FORM EXP -4.2(b)

Construction Experience in Key Activities

Tenderer's Name: _____

Date: _____

Tenderer's JV Member Name: _____

Sub-contractor's Name2 (as perITT34): _____

ITT No. and title: _____

All Sub-contractors for key activities must complete the information in this form as per ITT 34 and Section III, Evaluation and Qualification Criteria, Sub-Factor 4.2.

1. Key Activity No One: ___

	Information			
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ☐	Member in JV ☐	Management Contractor ☐	Sub-contractor ☐
Total Contract Amount			**Kenya Shilling**	
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year	Total quantity in the contract (i)	Percentage participation (ii)		Actual Quantity Performed (i) x (ii)
Year 1				
Year 2				
Year 3				
Year 4				
Procuring Entity's Name:				
Address: Telephone/fax number E-mail:				

	Information
Description of the key activities in accordance with Sub-Factor 4.2(b) of Section III:	

2. Activity No. Two

3. . ……

OTHER FORMS

7. FORM OF TENDER

INSTRUCTIONS TO TENDERERS

i) *The Tenderer must prepare this Form of Tender on stationery with its letterhead clearly showing the Tenderer's complete name and business address.*

ii) All italicized text is to help Tenderer in preparing this form.

iii) Tenderer must complete and sign CERTIFICATE OF INDEPENDENT TENDER DETERMINATION and the SELF DECLARATION OF THE TENDERER attached to this Form of Tender.

iv) The Form of Tender shall include the following Forms duly completed and signed by the Tenderer.

- Tenderer's Eligibility-Confidential Business Questionnaire.
- Certificate of Independent Tender Determination.
- Self-Declaration of the Tenderer.

Date of this Tender submission: [insert date (as day, month and year) of Tender submission] Request for Tender No.: [insert identification] Name and description of Tender [Insert as per ITT) Alternative No.: [insert identification No if this is a Tender for an alternative]

To: [insert complete name of Procuring Entity] Dear Sirs,

1. In accordance with the Conditions of Contract, Specifications, Drawings and Bills of Quantities for the execution of the above named Works, we, the undersigned offer to construct and complete the Works and remedy any defects therein for the sum of Kenya Shillings [[Amount in figures] _____Kenya Shillings [amount in words]

   The above amount includes foreign currency amount (s) of [state figure or a percentage and currency] [figures] [words]
   The percentage or amount quoted above does not include provisional sums, and only allows not more than two foreign currencies.
2. We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Engineer's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Particular Conditions of Contract.
3. We agree to adhere by this tender until [Insert date], and it shall remain binding upon us and may be accepted at any time before that date.
4. Unless and until a formal Agreement is prepared and executed this tender together with your written acceptance thereof, shall constitute a binding Contract between us. We further understand that you are not bound to accept the lowest or any tender you may receive.
5. We, the undersigned, further declare that:

i) *No reservations*: We have examined and have no reservations to the tender document, including Addenda issued in accordance with ITT 8;

ii) *Eligibility:* We meet the eligibility requirements and have no conflict of interest in accordance with ITT 3 and 4;

iii) *Tender-Securing Declaration:* We have not been suspended nor declared ineligible by the Procuring Entity based on execution of a Tender-Securing or Proposal-Securing Declaration in the Procuring Entity's Country in accordance with ITT 19.8;

iv) *Conformity:* We offer to execute in conformity with the tendering documents and in accordance with the implementation and completion specified in the construction schedule, the following Works: [insert a brief description of the Works];

v) *Tender Price:* The total price of our Tender, excluding any discounts offered in item 1 above is: [Insert one of the options below as appropriate]

vi) ***Option1***, in case of one lot: Total price is: [insert the total price of the Tender in words and figures, indicating the various amounts and the respective currencies]; Or

Option2, in case of multiple lots:

a) Total price of each lot [insert the total price of each lot in words and figures, indicating the various amounts and the respective currencies]; and

b) Total price of all lots (sum of all lots) [insert the total price of all lots in words and figures, indicating the various amounts and the respective currencies];

vii) *Discounts:* The discounts offered and the methodology for their application are:

viii) *The discounts offered are*: [Specify in detail each discount offered.]

ix) *The exact method o*f calculations to determine the net price after application of discounts is shown below: [Specify in detail the method that shall be used to apply the discounts];

x) *Tender Validity Period:* Our Tender shall be valid for the period specified in TDS 18.1 (as amended, if applicable) from the date fixed for the Tender submission deadline specified in TDS 22.1(as amended, if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

xi) *Performance Security:* If our Tender is accepted, we commit to obtain a Performance Security in accordance with the Tendering document;

xii) *One Tender Per Tender*: We are not submitting any other Tender(s) as an individual Tender, and we are not participating in any other Tender(s) as a Joint Venture member or as a subcontractor, and meet the requirements of ITT3.4, other than alternative Tenders submitted in accordance with ITT 13.3;

xiii) *Suspension and Debarment:* We, along with any of our subcontractors, suppliers, Engineer, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Public Procurement Regulatory Authority or any other entity of the Government of Kenya, or any international organization.

xiv) *State-owned enterprise or institution:* [select the appropriate option and delete the other] [We are not a state- owned enterprise or institution]/[We are a state-owned enterprise or institution but meet the requirements of ITT 3.7];

xv) *Commissions, gratuities, fees:* We have paid, or will pay the following commissions, gratuities, or fees with respect to the tender process or execution of the Contract: [insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]

Name of Recipient	Address	Reason	Amount

xvi) *Binding Contract:* We understand that this Tender, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;

xvii) *Not Bound to Accept*: We understand that you are not bound to accept the lowest evaluated cost Tender, the Most Advantageous Tender or any other. Tender that you may receive;

xviii) *Fraud and Corruption*: We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption;

xix) *Collusive practices*: We hereby certify and confirm that the tender is genuine, non-collusive and made with the intention of accepting the contract if awarded. To this effect we have signed the "Certificate of Independent Tender Determination" attached below.

xx) We undertake to adhere by the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal, copy available from _____ (specify website) during the procurement process and the execution of any resulting contract.

xxi) We, the Tenderer, have completed fully and signed the following Forms as part of our Tender:

a) Tenderer's Eligibility; Confidential Business Questionnaire – to establish we are not in any conflict to interest.

b) Certificate of Independent Tender Determination – to declare that we completed the tender without colluding with other tenderers.

c) Self-Declaration of the Tenderer– to declare that we will, if awarded a contract, not engage in any form of fraud and corruption.

d) Declaration and commitment to the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal.

Further, we confirm that we have read and understood the full content and scope of fraud and corruption as informed in

"Appendix 1- Fraud and Corruption" attached to the Form of Tender. **Name of the Tenderer:**

*[*insert complete name of person signing the Tender*]

Name of the person duly authorized to sign the Tender on behalf of the Tenderer: **[*insert complete name of person duly authorized to sign the Tender*]

Title of the person signing the Tender: [*insert complete title of the person signing the Tender*]

Signature of the person named above: [*insert signature of person whose name and capacity are shown above*] **Date signed** [*insert date of signing*] day of [*insert month*], [*insert year*]

Date signed_____day of_____,_____

Notes

* *In the case of the Tender submitted by joint venture specify the name of the Joint Venture as Tenderer*

** *Person signing the Tender shall have the power of attorney given by the Tenderer to be attached with the Tender,*

B. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

I, the undersigned, in submitting the accompanying Letter of Tender to the _____ [*Name of Procuring Entity]* for: _____ _____ *[Name and number of tender]* in response to the request for tenders made by: _____ *[Name of Tenderer*] do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of _____*[Name of Tenderer]* that:

1. I have read and I understand the contents of this Certificate;
2. I understand that the Tender will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am the authorized representative of the Tenderer with authority to sign this Certificate, and to submit the Tender on behalf of the Tenderer;
4. For the purposes of this Certificate and the Tender, I understand that the word "competitor" shall include any individual or organization, other than the Tenderer, whether or not affiliated with the Tenderer, who:
   a) has been requested to submit a Tender in response to this request for tenders;
   b) could potentially submit a tender in response to this request for tenders, based on their qualifications, abilities or experience;
5. The Tenderer discloses that [check one of the following, as applicable]:
   a) The Tenderer has arrived at the Tender independently from, and without consultation, communication, agreement or arrangement with, any competitor;
   b) The Tenderer has entered into consultations, communications, agreements or arrangements with one or more competitors regarding this request for tenders, and the Tenderer discloses, in the attached document(s), complete details thereof, including the names of the competitors and the nature of, and reasons for, such consultations, communications, agreements or arrangements;
6. In particular, without limiting the generality of paragraphs (5) (a) or (5) (b) above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
   a) prices;
   b) methods, factors or formulas used to calculate prices;
   c) the intention or decision to submit, or not to submit, a tender; or
   d) the submission of a tender which does not meet the specifications of the request for Tenders; except as specifically disclosed pursuant to paragraph (5) (b) above;
7. In addition, there has been no consultation, communication, agreement or arrangement with any competitor regarding the quality, quantity, specifications or delivery particulars of the works or services to which this request for tenders relates, except as specifically authorized by the procuring authority or as specifically disclosed pursuant to paragraph (5) (b) above;
8. The terms of the Tender have not been, and will not be, knowingly disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening, or of the awarding of the Contract, whichever comes first, unless otherwise required by law or as specifically disclosed pursuant to paragraph (5) (b) above.

Name: _____

Title: _____ Signature: _____

Date: _____

[Name, title and signature of authorized agent of Tenderer and Date]

SELF-DECLARATION FORMS

FORM SD1

SELF DECLARATION THAT THE PERSON/TENDERER IS NOT DEBARRED IN THE MATTER OF THE PUBLIC PROCUREMENT AND ASSET DISPOSAL ACT 2015.

I, ……., of Post Office Box ……..……. being a resident of ……. in the Republic of ……. do hereby make a statement as follows: -

1. THAT I am the Company Secretary/Chief Executive/Managing Director/Principal Officer/Director of ……...……. *(insert name of the Company)* who is a Bidder in respect of Tender No. ……. for ……. *(insert tender title/description)* for ……. *(insert name of the Procuring entity)* and duly authorized and competent to make this statement.

2. THAT the aforesaid Bidder, its Directors and subcontractors have not been debarred from participating in procurement proceeding under Part IV of the Act.

3. THAT what is deponed to herein above is true to the best of my knowledge, information and belief.

…… …….. ……..

(Title) *(Signature)* *(Date)*

Bidder Official Stamp

FORM SD2

SELF DECLARATION THAT THE TENDERER WILL NOT ENGAGE IN ANY CORRUPT OR FRAUDULENT PRACTICE

I, ……. of P. O. Box ……. being a resident of……. in the Republic of……. .do hereby make a statement as follows: -

1. THAT I am the Chief Executive/Managing Director/Principal Officer/Director of ……. ……...…… *(insert name of the Company)* who is a Bidder in respect of Tender No……. for ……... *(insert tender title/description)* for …… *(insert name of the Procuring entity)* and duly authorized and competent to make this statement.

2. THAT the aforesaid Bidder, its servants and/or agents /subcontractors will not engage in any corrupt or fraudulent practice and has not been requested to pay any inducement to any member of the Board, Management, Staff and/or employees and/or agents of……. *(insert name of the Procuring entity)* which is the procuring entity.

3. THAT the aforesaid Bidder, its servants and/or agents /subcontractors have not offered any inducement to any member of the Board, Management, Staff and/or employees and/or agents of……... *(name of the procuring entity)*

4. THAT the aforesaid Bidder will not engage/has not engaged in any corrosive practice with other bidders participating in the subject tender

5. THAT what is deponed to herein above is true to the best of my knowledge, information and belief.

…… …….. ……..

(Title) *(Signature)* *(Date)*

Bidder Official Stamp

DECLARATION AND COMMITMENT TO THE CODE OF ETHICS

I …….…… (person) on behalf of *(Name of the Business/Company/Firm)* …….declare that I have read and fully understood the contents of the Public Procurement & Asset Disposal Act, 2015, Regulations and the Code of Ethics for persons participating in Public Procurement and Asset Disposal and my responsibilities under the Code.

I do hereby commit to abide by the provisions of the Code of Ethics for persons participating in Public Procurement and Asset Disposal.

Name of Authorized signatory.....

Sign.....

Position.....

Office address..... Telephone.....

E-mail.....

Name of the Firm/Company.....

Date.....

(Company Seal/Rubber Stamp where applicable) Witness

Name.....

Sign.....

Date.....

D. APPENDIX 1-FRAUD AND CORRUPTION

(Appendix 1 shall not be modified)

1. **Purpose**

1.1 The Government of Kenya's Anti-Corruption and Economic Crime laws and their sanction's policies and procedures, Public Procurement and Asset Disposal Act (no. 33 of 2015) and its Regulation, and any other Kenya's Acts or Regulations related to Fraud and Corruption, and similar offences, shall apply with respect to Public Procurement Processes and Contracts that are governed by the laws of Kenya.

2. **Requirements**

2.1 The Government of Kenya requires that all parties including Procuring Entities, Tenderers, (applicants/proposers), Consultants, Contractors and Suppliers; any Sub-contractors, Sub-consultants, Service providers or Suppliers; any Agents (whether declared or not); and any of their Personnel, involved and engaged in procurement under Kenya's Laws and Regulation, observe the highest standard of ethics during the procurement process, selection and contract execution of all contracts, and refrain from Fraud and Corruption and fully comply with Kenya's laws and Regulations as per paragraphs 1.1 above.

2.2 Kenya's public procurement and asset disposal act (no. 33 of 2015) under Section 66 describes rules to be followed and actions to be taken in dealing with Corrupt, Coercive, Obstructive, Collusive or Fraudulent practices, and Conflicts of Interest in procurement including consequences for offences committed. A few of the provisions noted below highlight Kenya's policy of no tolerance for such practices and behavior:

1) a person to whom this Act applies shall not be involved in any corrupt, coercive, obstructive, collusive or fraudulent practice; or conflicts of interest in any procurement or asset disposal proceeding;

2) A person referred to under subsection (1) who contravenes the provisions of that sub-section commits an offence;

3) Without limiting the generality of the subsection (1) and (2), the person shall be—

   a) disqualified from entering into a contract for a procurement or asset disposal proceeding; or

   b) if a contract has already been entered into with the person, the contract shall be voidable;

4) The voiding of a contract by the procuring entity under subsection (7) does not limit any legal remedy the procuring entity may have;

5) An employee or agent of the procuring entity or a member of the Board or committee of the procuring entity who has a conflict of interest with respect to a procurement—

   a) shall not take part in the procurement proceedings;

   b) shall not, after a procurement contract has been entered into, take part in any decision relating to the procurement or contract; and

   c) shall not be a subcontractor for the bidder to whom was awarded contract, or a member of the group of bidders to whom the contract was awarded, but the subcontractor appointed shall meet all the requirements of this Act.

6) An employee, agent or member described in subsection (1) who refrains from doing anything prohibited under that subsection, but for that subsection, would have been within his or her duties shall disclose the conflict of interest to the procuring entity;

7) If a person contravenes subsection (1) with respect to a conflict of interest described in subsection (5) (a) and the contract is awarded to the person or his relative or to another person in whom one of them had a director indirect pecuniary interest, the contract shall be terminated and all costs incurred by the public entity shall be made good by the awarding officer. Etc.

2.3 In compliance with Kenya's laws, regulations and policies mentioned above, the Procuring Entity:

a) Defines broadly, for the purposes of the above provisions, the terms set forth below as follows:

i) "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;

ii) "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;

iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;

iv) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;

v) "obstructive practice" is:

- deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede investigation by Public Procurement Regulatory Authority (PPRA) or any other appropriate authority appointed by Government of Kenya into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
- acts intended to materially impede the exercise of the PPRA's or the appointed authority's inspection and audit rights provided for under paragraph 2.3 e. below.

b) Defines more specifically, in accordance with the above procurement Act provisions set forth for fraudulent and collusive practices as follows:

"fraudulent practice" includes a misrepresentation of fact in order to influence a procurement or disposal process or the exercise of a contract to the detriment of the procuring entity or the tenderer or the contractor, and includes collusive practices amongst tenderers prior to or after tender submission designed to establish tender prices at artificial non-competitive levels and to deprive the procuring entity of the benefits of free and open competition.

c) Rejects a proposal for award1 of a contract if PPRA determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;

d) Pursuant to the Kenya's above stated Acts and Regulations, may sanction or recommend to appropriate authority(ies) for sanctioning and debarment of a firm or individual, as applicable under the Acts and Regulations;

e) Requires that a clause be included in Tender documents and Request for Proposal documents requiring (i) Tenderers (applicants/proposers), Consultants, Contractors, and Suppliers, and their Sub-contractors, Sub- consultants, Service providers, Suppliers, Agents personnel, permit the PPRA or any other appropriate authority appointed by Government of Kenya to inspect2 all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the PPRA or any other appropriate authority appointed by Government of Kenya; and

f) Pursuant to Section 62 of the above Act, requires Applicants/Tenderers to submit along with their Applications/Tenders/Proposals a "Self-Declaration Form" as included in the procurement document declaring that they and all parties involved in the procurement process and contract execution have not engaged/will not engage in any corrupt or fraudulent practices.

1For the avoidance of doubt, a party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and tendering, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

2 Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Investigating Authority or persons appointed by the Procuring Entity to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

FORM OF TENDER SECURITY- [Option 1–Demand Bank Guarantee]

Beneficiary: _____

Request for Tenders No: _____

Date: _____

TENDER GUARANTEE No.: _____

Guarantor: _____

1. We have been informed that _____ (here in after called "the Applicant") has submitted or will submit to the Beneficiary its Tender _____ _____ (here in after called" the Tender") for the execution of _____ under Request for Tenders No. _____ ("the ITT").
2. Furthermore, we understand that, according to the Beneficiary's conditions, Tenders must be supported by a Tender guarantee.
3. At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ _____ ( ) upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant:
   (a) has withdrawn its Tender during the period of Tender validity set forth in the Applicant's Letter of Tender ("the Tender Validity Period"), or any extension thereto provided by the Applicant; or
   c) having been notified of the acceptance of its Tender by the Beneficiary during the Tender Validity Period or any extension thereto provided by the Applicant, (i) has failed to execute the contract agreement, or (ii) has failed to furnish the Performance.
4. This guarantee will expire: (a) if the Applicant is the successful Tenderer, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security and, or (b) if the Applicant is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii) thirty days after the end of the Tender Validity Period.
5. Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

_____

[signature(s)]

FORMAT OF TENDER SECURITY [Option 2–Insurance Guarantee]

TENDER GUARANTEE No.: _____

1. Whereas ..... *[Name of the tenderer]* (hereinafter called "the tenderer") has submitted its tender dated ..... [Date of submission of tender] for the ..... *[Name and/or description of the tender]* (hereinafter called "the Tender") for the execution of under Request for Tenders No. ..... *("the ITT")*.
2. KNOW ALL PEOPLE by these presents that WE ..... of ..... *[Name of Insurance Company]* having our registered office at ..... (hereinafter called "the Guarantor"), are bound unto ..... *[Name of Procuring Entity]* (hereinafter called "the Procuring Entity") in the sum of ..... *(Currency and guarantee amount)* for which payment well and truly to be made to the said Procuring Entity, the Guarantor binds itself, its successors and assigns, jointly and severally, firmly by these presents.

   Sealed with the Common Seal of the said Guarantor this ___day of _____ 20 __

3. NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Applicant:
   a) has withdrawn its Tender during the period of Tender validity set forth in the Principal's Letter of Tender ("the Tender Validity Period"), or any extension thereto provided by the Principal; or
   b) having been notified of the acceptance of its Tender by the Procuring Entity during the Tender Validity Period or any extension thereto provided by the Principal; (i) failed to execute the Contract agreement; or (ii) has failed to furnish the Performance Security, in accordance with the Instructions to tenderers ("ITT") of the Procuring Entity's Tendering document.

   then the guarantee undertakes to immediately pay to the Procuring Entity up to the above amount upon receipt of the Procuring Entity's first written demand, without the Procuring Entity having to substantiate its demand, provided that in its demand the Procuring Entity shall state that the demand arises from the occurrence of any of the above events, specifying which event(s) has occurred.
4. This guarantee will expire: (a) if the Applicant is the successful Tenderer, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security and, or (b) if the Applicant is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii)twenty-eight days after the end of the Tender Validity Period.
5. Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

_____	_____
[Date]	[Signature of the Guarantor]
_____	_____
[Witness]	[Seal]

Note: All italicized text is for use in preparing this form and shall be deleted from the final product.

FORM OF TENDER-SECURING DECLARATION

[The Bidder shall complete this Form in accordance with the instructions indicated]

Date: ..... *[Insert date (as day, month and year*) of Tender Submission]

Tender No.: ..... *[Insert number of tendering process]*

To: ..... *[Insert complete name of Purchaser]*

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Tender-Securing Declaration.
2. I/We accept that I/we will automatically be suspended from being eligible for tendering in any contract with the Purchaser for the period of time of [insert number of months or years] starting on [insert date], if we are in breach of our obligation(s) under the bid conditions, because we–(a) have withdrawn our tender during the period of tender validity specified by us in the Tendering Data Sheet; or (b) having been notified of the acceptance of our Bid by the Purchaser during the period of bid validity, (i) fail or refuse to execute the Contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the instructions to tenders.
3. I/We understand that this Tender Securing Declaration shall expire if we are not the successful Tenderer(s), upon the earlier of:
   a) our receipt of a copy of your notification of the name of the successful Tenderer; or
   b) thirty days after the expiration of our Tender.

4. I/We understand that if I am/we are/in a Joint Venture, the Tender Securing Declaration must be in the name of the Joint Venture that submits the bid, and the Joint Venture has not been legally constituted at the time of bidding, the Tender Securing Declaration shall be in the names of all future partners as named in the letter of intent.

Signed: ……..

Capacity / title ……..…….
(*director or partner or sole proprietor, etc.)*

Name: ……..

Duly authorized to sign the bid for and on behalf of: …….
[insert complete name of Tenderer]

Dated on……. day of…….……
[Insert date of signing]
Seal or stamp

Appendix to Tender

Schedule of Currency requirements

Summary of currencies of the Tender for_____ *[insert name of Section of the Works]*

Name of currency	***Amounts payable***
Local currency: _____	
Foreign currency #1: _____	
Foreign currency #2: _____	
Foreign currency #3: _____	
Provisional sums expressed in local currency _____	[To be entered by the Procuring Entity]

5. TECHNICAL PROPOSAL

The tender shall complete these sections as a Technical proposal to indicate how he/she intends to proceed with the works. The Procuring entity will review these Proposals and determine the extent to which they meet the required standards to complete the works.

5.1 Site Organization

[Insert Site Organization information]

5.2 Method Statement

[Insert Method Statement]

5.3 Mobilization Schedule

[Insert Mobilization Schedule]

5.4 Construction Schedule

[Insert Construction Schedule]

PART II: WORKS REQUIREMENT

SECTION V – BILLS OF QUANTITIES

A. Notes and Sample Items for Preparing a Bill of Quantities

1. These Notes for Preparing a Bill of Quantities are intended only as information for the Procuring Entity or the person drafting the Tender Documents. Priced Bills of Quantities shall be part and parcel of the Contract Documents.

2. The objectives and purpose of the Bills of Quantities are to provide sufficient information on the specifications, descriptions and quantities of Works to be performed to enable tenders to be prepared efficiently and accurately and when a contract has been entered into, to provide a priced Bill of Quantities for use in the periodic valuation of Works executed. In order to attain these objectives, Works should be itemized in the Bill of Quantities insufficient detail to distinguish between the different classes of Works, or between Works of the same nature carried out in different locations or in other circumstances which may give rise to different considerations of cost. Consistent with these requirements, the layout and content of the Bill of Quantities should be as simple and clear as possible.

3. The Bills of Quantities should be divided generally into the following sections:

a) Preambles
b) Preliminary items
c) Work Items
c) Daywork Schedule; and
d) Provisional items
e) Summary.

4. NOTES TO PREPARING PREAMBLES

4.1 The Preambles should include only those items that constitute the cost of the works but would not be priced separately as they are expected to be included in the unit prices. Care should be taken to ensure that these items are not are petition of the conditions of contract. The Preambles should indicate the inclusiveness of the unit prices and should state the methods of measurement that have been adopted in the preparation of the Bill of Quantities, that are to be used for the measurement of any part of the Works. The units of measurement and abbreviations should be defined and any mandatory national units defined and described. The methods of and procedure for re- measurement should be described in the Preambles.

4.2 Units of Measurement - The following units of measurement and abbreviations shall be used, unless other national units are mandatory in Kenya.

Unit	Abbreviation	Unit	Abbreviation
cubic meter	m^3 *or* cu m	millimetre	mm
hectare	ha	month	mon
hour	h	number	nr

kilogram	kg	square meter	m^2 *or* sq m
lump sum	ls	square millimeter	mm^2 *or* sq mm
meter	m	week	wk
metric ton	t		

4.3 The Bills of Quantities shall be read in conjunction with the Instructions to Tenders, General and Special Conditions of Contract, Technical Specifications, and Drawings.

4.4. The quantities given in the Bills of Quantities are estimated and partly provisional and are given to provide a common basis for tendering. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Architect and valued at the rates and prices tender in the priced Bills of Quantities, where applicable, and otherwise at such rates and prices as the Architect may fix within the terms of the Contract.

4.5. The rates and prices tender in the priced Bills of Quantities shall, except in so far as it is otherwise provided under the Contract, include all Constructional Plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes, and duties, together with all general risks, liabilities, and obligations set out or implied in the Contract.

4.6. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of Items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.

4.7. The whole cost of complying with the provisions of the Contract shall be included in the Items provided in the priced Bills of Quantities, and where no Items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.

4.8. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bills of Quantities. References to the relevant sections of the Contract documents shall be made before entering prices against each item in the priced Bills of Quantities.

4.9 Provisional Sums and contingency sums included and so designated in the Bills of Quantities shall be expended in whole or in part at the direction and discretion of the Architect in accordance with Sub-Clause13.5 and Clause 13.6 of the General Conditions of contract.

4.10 In preparing the Bills of Quantities, notes should be removed as they are intended to guide the person preparing the Tender Documents. The Contractor must allow in his rates for any costs associated with and complying with the requirements in the Preambles.

4.11 Should a tenderer/contractor not price any item in any section of the Bills of Quantities including Preliminary items, it will be assumed that he/she has spread its cost in other areas that he/she will have priced. Therefore, the item or items will be executed without any additional costs or without being treated like variations.

5. NOTES ON PREPARING BILLS OF QUANTITIES

5.1 The Preliminary Items should be limited to tangible items that should be priced by the tenderer, are identifiable and can be priced separately and included in the interim valuations precisely. Such items may include such items as site office, notice boards, and other temporary works, otherwise items such

as security for the Works which are primarily part of the Contractor's obligations should be included in the Contractor's rates.

5.2 The work items in the Bills of Quantities should be grouped into sections to distinguish between those parts of the Works which by nature, location, access, timing, or any other special characteristics may give rise to different methods of construction, or phasing of the Works, or considerations of cost. Such groups could be ground excavations, structures, external works, services, etc. General items common to all parts of the Works may be grouped as a separate section in the Bill of Quantities.

5.3 Quantities should be computed net from the Drawings, unless directed otherwise in the Contract, and no allowance should be made for bulking, shrinkage or waste. Quantities should be rounded up where appropriate.

5.4 Where the measured items a redeemed not to be exact because of the likelihood that the scope can change during the execution of the works, such items could be subject to re-measurement, the word "provisional" should be used to identify such cases. Where whole sections of the work items fall in this class, for example foundations, they should be labelled "Provisional Quantities" or "Provisional Items" so that the Tenderer/Contractor is advised up front that such items are subject to re-measurement to done before such work is cover-up.

5.5 All items that have not been measured and therefore not subject tot enders pricing should be listed in the Bills of Quantities as Provisional Sums for particular item or class of Work, which may be subject to a nominated subcontract or separate measurements at a later date during the execution of the works. For example, if it is deemed not possible to measure electrical works before going to tender because detail designs are not ready, a provisional sum can be allowed in the Bills of Quantities for "Installation of Electrical Works" to be executed later when actual design details are completed. To the extent not covered above, there should be in the Bills of Quantities a general provision for physical and financial contingencies made as a "Provisional Sum for Contingencies" and "Provisional Sum for Fluctuations". The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises.

5.6 Provisional sums to cover specialized works normally carried out by Nominated Sub Contractors should be avoided and instead Bills of Quantities of the specialized Works should be included as a section of the main Bills of Quantities to be priced by the Main Contractor. The Main Contractor should be required to indicate the name(s) of the specialized firms he proposes to engage to carry out the specialized Works as his approved domestic sub-contractors. Only provisional sums to cover specialized Works by statutory authorities should be included in the Bills of Quantities.

5.7 A Daywork Schedule should be included if the probability of unforeseen work, outside the items included in the Bill of Quantities, is relatively high. To facilitate checking by the Procuring Entity of the realism of rates quoted by the tenderers, the Daywork Schedule should normally comprise:

i) A list of the various classes of labor, and materials for which basic.

ii) Daywork rates and prices for various categories of labor are to be inserted by the tenderer, together with a statement of the conditions under which the Contractor will be paid for Work executed on a Daywork basis.

iii) A percent a get o be entered by the tenderer agains teach basic Day work item.

iv) Subtotal amount for labor, materials and plant representing the Contractor's profit, overheads, supervision and other charges.

5.8 The Summary should contain a tabulation of the separate parts of the Bills of Quantities carried forward, with provisional sums for Daywork, Provisional sums and Contingencies, and provision for Total Costing. The last line should allow for tenderer to indicate any discounts before arriving at a total cost carried forward to the Form of Tender.

BILLS OF QUANTITIES

(a) Preambles

1. The method of measurement of completed work for payment shall be in accordance with [insert the name of a standard reference guide, or full details of the methods to be used].

2. The Site is situated in (Veterinary Kitale trans nzoia county) is approximately …1.. kilometers from Kitale town cbd . Access to the site shall be through (kitale suam road),

   Which is an existing public road. Any damage caused to the surfaces of this road shall be made good at the Contractor's expense. The Contractor shall visit the site and acquaint itself with its nature and position, the nature of the ground, substrata and other local conditions, positions of existing power, water and other services, access roads or any other limitations that might affect his cost or progress. No claim for extras shall be considered on account of lack of knowledge in this respect.

3. The Contractor shall obtain the Architect's approval on the siting of all temporary buildings, spoil heaps, temporary access path, and storage of materials. The Contractor shall also obtain the Architect approval and direction regarding the use of any materials found on the Site.

4. The drawings used in the preparation of these Bills of Quantities can be inspected at the offices of the Procuring Entityor Procuring Entity's Representative during normal working hours. Two sets of the Working Drawings shall be provided to the contractor but additional copies shall be provided at a cost to be determined by the Engineer.

5. The Contractor shall allow for the payment of all bank charges in connection with the procurement of Bank Guarantees and stamp charges in connection with this contract Agreement.

6. The Contractor shall carry out the various sections of the Works in such an order as the Architect May direct. The Procuring Entity reserves the right to occupy the Works by sections on completion provided that such occupation is considered to be both practical and reasonable and will not interfere with the Works. The Contractor shall allow any costs associated with such occupation.

7. The main Contractor will be fully responsible for paying his Sub-Contractor but the Procuring Entity reserves the right in very exceptional circumstances to make such payments direct in the interests of the project where the completion thereof might be jeopardized by any dispute or vicariousness between the Contractor and the Sub- Contractor involve.

8. The Contractor shall complete and deliver the Works in the period inserted in the Form of Tender as his time for completion of the Works from the date for Possession, to be agreed with the Engineer. The Contract Period is presumed to have been calculated making due allowance for seasonal inclement weather conditions. Noclaimfor extension of time due to the normal in clement weather for this area shall be entertained.

9. The Contractor shall, upon receiving instructions to proceed with the Works, draw up a Programme and Progress Chart setting out the order in which the Works are to be carried out, with the appropriate dates there of. This Chart shall be agreed with the Architect and no deviation from the order set out in it will be permitted without the written consent of the Engineer. The Contractor will be responsible for arranging the above programme with all his sub-Contractors and Specialties. The Contractor shall allow in his rates for carrying out this exercise, and for updating it as required.

10. The Contractor shall submit to the Architect on the first day of each week or such longer period as the Architect from time to time direct, a Progress Report and any information for the proceeding period, showing the progress during the period and the up-to-date cumulative progresson all important items of each section or portion of the Works.

11. The Contractor shall arrange for photographs of the Site to be taken by a professional photographer approved by the Engineer. The Photographs shall provide a record of the Site and adjacent are as prior to the commencement of the Works and shall cover such portion of the works in progress and completion as the Architect shall direct. All prints shall be full plate size, unmounted, and marked on the reverse side with the date of exposure, identification reference and brief description. The copyright of all photographs shall be vested in the Procuring Entity. The negatives and four prints from each negative shall be delivered to the Architect within two weeks of exposure.

12. Figured dimensions are to be followed in preference to dimensions scaled from the Drawings, but whenever possible dimensions are to be taken on the Site or from the buildings. Before any work is commenced by Sub- Contractors or Specialist Firms, dimensions must be checked on the site comparable dimensions shown on the drawings. The Contractor shall be responsible for the accuracy of such dimensions.

13. Prior to commencement of any work the Contractor is to ascertain from the relevant Authorities the exact position, depth and level of all existing electric cables, waterpipes or other services in the are aand he shall make whatever provisions may be required by the Authorities concerned for the support and protection of such services. Any damage or disturbance caused to any services shall be reported immediately to the Architect and the relevant Authority and shall be made good to their satisfaction at the Contractor's expense. Where appropriate the Contractor shall open up the ground in advance of the main work by hand digging if necessary, to locate precisely the position and details of the services which are likely to affect his operations.

14. The Contractor shall include in his prices for the transport of materials, workmen, etc./, to and from the site of the proposed works, at such hours and by such route as are permitted by the Authorities.

15. The Contractor will be required to make good, at his own expense and damage he may cause to the present road surface and pavements within or beyond the boundary of the Site, during the period of the works. All existing paths, storm water channels, etc., that may be destroyed or damaged during the progress of the Works shall be reinstated by the Contractor to the satisfaction of the Engineer.

16. The Contractor is to allow for complying with all instructions and regulations of the Police Authorities.

17. All water shall be fresh, clean and pure, free from earthly, vegetable or organic matter, acid or alkaline substance in solution. The Contractor shall provide at his own risk and cost all water for use in connection with the Works, (including works of sub–contractors). If need be, he shall make arrangements with the Local Water Authority for the installation of a separate meter for all water used by him throughout the Contract and pay all cost and fees in connection therewith. He shall also provide temporary storage tanks and tubing, etc., as may be necessary, and clear away at completion.

18. The Contractor shall provide all artificial lighting and power for his own use on the Works, (including Sub – Contractor's) including all temporary connections, wiring, fittings, etc., and clearing away on completion. The Contractor shall pay all fees and obtain all permits in connection there with.

19. The Contractor shall constantly keep on the Works a Literate English-speaking Agent or Representative, competent and experienced in the kind of work involved, who shall giveh is whole time to the superintendence of the works. (Including works of sub – contractors). Such Agent or Representative shall receive on behalf of the Contractor directions and instruction from the Engineer, and such directions and instructions shall be deemed to be given to the contractor in accordance with the Conditions of Contract. The Agent shall not be replaced without the specific approval of the Engineer.

20. The Contractor shall ensure that the safety of his work people and all authorized visitors to the site are protected at all times. In particular, there shall be the proper provision of guard–rails to scaffolding, protection against falling materials, tools on site, dust, nail and other sharp objects. The site shall be kept tidy and clear of dangerous rubbish. The Architect shall be empowered to suspend work on site should it be considered this condition is not being observed and no claim arising from such suspension will be allowed.

21. The are as available to the Contractor for work yards, offices and other facilities shall be directed by the Architect and any existing features to remain shall be protected from damage throughout the Contract Period and handed back in good condition when they are vacated at the end of the Contract. If additional areas are required, the contractor shall source then at own cost.

22. The Contractor shall give the Architect reasonable notice of the intention to set out or take levels for any part of the Works so that arrangements may be made for checking the work. The accuracy of setting out and leveling shall be within the tolerances specified in the Specifications or on the Drawings. The checking of setting out or leveling by the Architect shall not relieve the Contractor of his duties or responsibilities under the Contract.

23. The Contractor must take steps necessary to safe guard and shall beheld fully responsible for any damage caused to existing and adjacent property, including buildings that are not a subject of demolition. He shall make good at his own cost damage to persons and property caused there on, and he shall indemnify the Procuring Entity against any loss or claim that may arise.

24. The Contractor shall take such steps and exercise such care and diligence as to minimize nuisance arising from dust, noise or any other cause to the occupiers of the existing and adjacent property. He must provide such temporary and special screens and tarpaulins or gummy bags, hoarding, barriers, warning signs etc. as he considers necessary and sufficient for the protection of the existing and adjacent property and or prevention of nuisance etc. as directed by Engineer.

25. The Contractors attention is drawn to the standards levy order which was amended on 15thOctober 1998.Legal notice No.154 of 1998. The Contractor is required to pay a monthly level of 0.2% of his factory price of construction works with effect from January 1999. Tenderer shall allow for this in the build-up of his rates.

26. The Contractor shall provide temporary sheds, offices mesh rooms, sanitary, accommodation and other temporary buildings for the use of the contractor and sub-contractors, including lighting furniture equipment and attendance.

27. Contractor shall provide/build labor camp sat areas to be agreed with the Engineer. Labor camps shall be complete with sanitary accommodation and fencing gates.

28. The Contractor must provide the necessary toilet facilities to the requirement and satisfaction of the Health Authorities and maintain the same in a thoroughly clean and sanitary condition and pay all conservancy fees during the period of the Works and remove when no longer required.

29. The Contractor shall provide at his own risk and cost all watching and lighting as necessary to safeguard the Works, Plant and materials against damage and theft.

30. The Contractor shall provide all necessary hoists, tackle, plant, equipment, vehicles, tools and appliances of every description for the due and satisfactory completion of the Works and shall remove the same on completion. All such plant, tools and equipment shall comply with all regulations in force throughout the period of the Contract and shall be altered or adopted during the Contract period as may be necessary to comply with any amendments in or additions to such regulations.

31. Provide, erect and maintain all necessary scaffolding, sufficiently strong and efficient for the due performance of the works, including Sub-Contract Works, provide special scaffolding as required by Sub-Contractors, alter and adopt all scaffolding as and when required during the Works, and remove on completion. No scaffolding is measured here in after and the Contractor must allow in his rates for this.

32. The Contractor shall take all necessary precautions such as temporary fencing, hoarding fans, planked footways, guard–rails gantries screen, etc., for the safe custody of the Works, materials and public protection and adjacent properties.

33. Cover up all and protect from damage, including damage from in clement weather, all finished work and unfixed materials, including that of Sub-Contractors, etc., to the satisfaction of the Architect until the completion of the Contract.

34. The Contractor shall, after completion of the works, at his own expense, remove and clear away all surplus excavated demolition materials, plant, rubbish and unused materials and shall leave the whole of the Site and Works in a clean and tidy state to the satisfaction of the Engineer, sheds, camps, etc. Particular care shall be taken to leave clean all floors and windows and tore move all paint and cement all rubbish and dirt as it accumulates. The Contractor is to find his own dump and shall pay all charges in connection there with.

35. Concrete test cubes shall be prepared in a set of three, as described including testing fees, labor and materials, making molds, transport, handling, etc. Allow in your rates for making at least four cubes on each occasion, from different batches; the concrete being taken from the point of deposit.

36. The Contractors hall furnish at the earliest possible opportunity before work commences, and at his own cost, any samples of materials and workmanship that may be called for by the Architect for the approval or rejection, and any further samples in the case of rejection, until such samples are approved by the Engineer. Such samples, when approved, shall be the minimum standard for the work to which they apply. The procedure for submitting samples of materials for testing or approval and the method of marking for identification shall be as laid down by the Engineer. The Contractor shall allow in his Tender for such samples and tests, including those in connection with his Sub-Contractors work.

37. The Contractors attention is drawn to the Finance Bill of the year 2000/2001 on withholding tax on contractual payment section 35(7)(i)(ii) which became effective on 1st July 2000. A 3% withholding tax will be applicable to all interim payments exceeding Kshs……..……. for work done in

respect of building or civil works. The contractor shall allow for any costs arising resulting there from in the build-up of rates.

38. Blasting will only be allowed with the express permission of the Architect in writing. All blasting operations shall be carried out at the Contractor's sole risk and cost, in accordance with any Government regulations in force for the time being, and any special regulations laid down by the Architect governing the use and storage of explosives.

39. The National Construction Authority is a state corporation established under the national construction authority Act No.14 of 2011. The broad Mandate of the Authority is to over see the construction industry and coordinate its development. The National Construction Authority Regulations 2014 with an effective date of 6thJune 2014, regulation 25, - Allow 0.5% of the tender sum/contract sum for construction levy.

40. The Contractor attention is drawn to Finance Bill of 1993 where VAT was introduced in all contracts for construction services. The tenderer is also drawn to VAT Act Cap 476 clause 19(9). The tenderer must allow for VAT 1.19 as instructed elsewhere.

41. The contractor shall allow and pay for all insurance to cover risks and indemnities required Items 17 and 18 of the Conditions of contract and also specified in the Special Conditions of Contract.

(see attached appendix I Bill of Quantities)

SECTION VI - SPECIFICATIONS

Notes for preparing Specifications

1. Specifications must be drafted to present a clear and precise statement of the required standards of materials, and workmanship or tenderers to respond realistically and competitively to the requirements of the Procuring Entity and ensure responsiveness of tenders. The Specifications should require that all materials, plant, and other supplies to be permanently incorporated in the Works be new, unused, of the most recent or current models, and incorporating all recent improvements in design and materials unless provided otherwise in the Contract. Where the Contractor is responsible for the design of any part of the permanent Works, the extent of his obligations must be stated.

2. Specifications from previous similar projects are useful and may not be necessary to re-write specifications for every Works Contract.

3. There are considerable advantages in standardizing General Specifications for repetitive Works in recognized public sectors, such as high ways, urban housing, irrigation and water supply. The General Specifications should cover all classes of workmanship, materials and equipment commonly involved in constructions, although not necessarily to be used in a particular works contract. Deletions or addenda should then adapt the General Specifications to the particular Works.

4. Care must be taken in drafting Specifications to ensure they are not restrictive. In the Specifications of standards for materials, plant and workmanship, existing Kenya Standards should be used as much as possible, otherwise recognized international standards may also be used.

5. The Procuring Entity should decide whether technical solutions to specified parts of the Works are to be permitted. Alternatives are appropriate in cases where obvious (and potentially less costly) alternatives are possible to the technical solutions indicated in tender documents for certain elements of the Works, taking into consideration the comparative specialized advantage of potential tenderers.

6. The Procuring Entity should provide a description of the selected parts of the Works with appropriate reference to Drawings, Specifications, Bills of Quantities, and Design or Performance criteria, stating that the alternative solutions shall be at least structurally and functionally equivalent to the basic design parameters and Specifications.

7. Such alternative solutions shall be accompanied by all information necessary for a complete evaluation by the Procuring Entity, including drawings, design calculations, technical specifications, breakdown of prices, proposed construction methodology, and other relevant details. Technical alternatives permitted in this manner shall be considered by the Procuring Entity each on its own merits and independently of whether the tenderer has priced the item as described in the Procuring Entity's design included with the tender documents.

(see attached appendix II Specifications)

SECTION VII - DRAWINGS

Note A list of drawings should be inserted here. The actual drawings including Site plans should be annexed in a separate booklet.

(see attached appendix III Drawings)

PART III: THE CONDITIONS OF CONTRACT AND CONTRACT

SECTION VIII - GENERAL CONDITIONS OF CONTRACT (GCC)

THE COUNTY GOVERNMENT OF TRANS NZOIA
THE PROPOSED REHABILITATION AND MODERNIZATION OF KENYATTA STADIUM - PHASE 1A COMPLETION.
Issued by: - THE CHIEF OFFICER, PUBLIC WORKS AND ENERGY TRANS NZOIA COUNTY, P.O. BOX 4211 - 30200, KITALE

General Conditions of Contract

1. GENERALPROVISIONS

1.1 Definitions

In this Contract, except where context otherwise requires, the following terms shall be interpreted as indicated below. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

"Accepted Contract Amount" means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.

"Base Date" means a date 30 day prior to the submission of tenders.

"Bill of Quantities" means the priced and completed Bill of Quantities forming part of the tender. "Completion Date" means the date of completion of the Works as certified by the Engineer.

"Contract Price" means the price defined in the contract and there after as adjusted in accordance with the provisions of the Contract.

"Contract" means the agreement entered into between the Procuring Entity and the Contractor as recorded in the Agreement Form and signed by the parties including all attachments and appendices thereto and all documents incorporated by reference therein to execute, complete, and maintain the Works.

"Contractor's Documents" means the calculations, computer programs and other software, progress reports, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Contractor under the Contract.

"Contractor's Equipment" means all apparatus, machinery, vehicles and other things required for the execution and completion of the Works and the remedying of any defects. However, Contractor's Equipment excludes Temporary Works, Procuring Entity's Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.

"Contractor's Personnel" means the Contractor's Representative and all personnel whom the Contractor utilizes on Site, who may include the staff, labor and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the Works.

"Contractor's Representative" means the person named by the Contractor in the Contractor appointed from time to time by the Contractor who acts on behalf of the Contractor.

"Contractor" means the person(s) named as contractor in the Form of Tender accepted by the Procuring Entity.

"Cost" means expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.

"Day" means a calendar day and "year" means 365 days.

"Dayworks" means Work inputs subject to payment on a time basis for labour and the associated materials and plant.

"Defect" means any part of the Works not completed in accordance with the Contract.

"Defects Liability Certificate" means the certificate issued by Architect upon correction of defects by the Contractor.

"Defects Liability Period" means the period named in the Special Conditions of Contract and calculated from the Completion Date, within which the contractor is liable for any defects that may develop in the handed over works.

"Defects Notification Period" means the period for notifying defects in the Works or a Section (as the case maybe) under Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects], which extends over the days stated in the Special Conditions of Contract.

"Drawings" means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Procuring Entity in accordance with the Contract.

"Final Payment Certificate" means the payment certificate issued under Sub-Clause 14.13 [Issue of Final Payment Certificate].

"Final Statement" means the statement defined in Sub-Clause 14.11 [Application for Final Payment Certificate]. "Force Majeure" is defined in Clause19 [Force Majeure].

"Foreign Currency" means a currency of another country (not Kenya) in which part (or all) of the Contract Price is payable, but not the Local Currency.

"Goods" means Contractor's Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.

"Interim Payment Certificate" means a payment certificate issued under Clause 14 [Contract Price and Payment], other than the Final Payment Certificate.

"Laws" means all national legislation, statutes, ordinances, and regulations and by-laws of any legally constituted public authority.

"Letter of Acceptance" means the letter of formal acceptance of a tender, signed by Procuring Entity, including any annexed memoranda comprising agreements between and signed by both Parties.

"Local Currency" means the currency of Kenya.

"Materials" means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the Contractor under the Contract.

"Notice of Dissatisfaction" means the notice given by either Party to the other under Sub-Clause 20.3 indicating its dissatisfaction and intention to commence arbitration.

"Special Conditions of Contract" means the pages completed by the Procuring Entity entitled Special Conditions of Contract which constitute Part A of the Special Conditions.

"Party" means the Procuring Entity or the Contractor, as the context requires.

"Payment Certificate" means a payment certificate issued under Clause 14 [Contract Price and Payment]. "Performance Certificate" means the certificate issued under Sub-Clause 11.9 [Performance Certificate]. "Performance Security" means the security (or securities, if any) under Sub-Clause 4.2 [Performance Security]. "Permanent Works" means the permanent works to be executed by the Contractor under the Contract.

"Plant" means the apparatus, machinery and other equipment intended to form or forming part of the Permanent Works, including vehicles purchased for the Procuring Entity and relating to the construction or operation of the Works.

"Procuring Entity's Equipment" means the apparatus, machinery and vehicles (if any) made available by the

Procuring Entity for the use of the Contract or in the execution of the Works, as stated in the Specification; but does not include Plant which has not been taken over by the Procuring Entity.

"Procuring Entity's Personnel" means the Engineer, the Engineer, the assistants and all other staff, labor and other employees of the Architect and of the Procuring Entity; and any other personnel notified to the Contractor, by the Procuring Entity or the Engineer, as Procuring Entity's Personnel.

"Procuring Entity" means the Entity named in the Special Conditions of Contract.

"Engineer" is the person named in the Appendix to Conditions of Contract (or any other competent person appointed by the Procuring Entity and notified to the Contractor, to act in replacement of the Engineer) who is responsible for supervising the execution of the Works and administering the Contract and shall be an "Architect" or a "Quantity Surveyor" registered under the Architects and Quantity Surveyors Act Cap 525 or an "Engineer" registered under Engineers Registration Act Cap 530.

"Engineer" means the person appointed by the Procuring Entity to act as the Architect for the purposes of the Contract and named in the Special Conditions of Contract, or other person appointed from time to time by the Procuring Entity and notified to the Contractor

"Provisional Sum" means a sum (if any) which is specified in the Contract as a provisional sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub-Clause 13.5 [Provisional Sums].

"Retention Money" means the accumulated retention moneys which the Procuring Entity retains under Sub-Clause

14.3 [Application for Interim Payment Certificates] and pays under Sub-Clause 14.9 [Payment of Retention Money].

"Schedules" means the document(s) entitled schedules, completed by the Contractor and submitted with the Form of Tender, as included in the Contract.

"Section" means a part of the Works specified in the Special Conditions of Contract as a Section (if any)

"Site Investigation Reports" are those reports that may be included in the tendering documents which a ref actual and interpretative about the surface and sub-surface condition sat the Site.

"Site" means the places where the Permanent Works are to be executed, including storage and working areas, and to which Plant and Materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.

"Specification" means the document entitled specification, as included in the Contract, and any additions and modifications to the specification in accordance with the Contract. Such document specifies the Works.

"Start Date" or "Commencement Date"is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with the Site possession date(s).

"Statement" means a statement submitted by the Contractor as part of an application, under Clause 14 [Contract Price and Payment], for a payment certificate.

"Subcontractor" means any person named in the Contract as a subcontractor, or any person appointed as a subcontractor, for a part of the Works.

"Taking-Over Certificate" means a certificate issued under Clause 10 [Procuring Entity's Taking Over].

"Temporary Works" means all temporary works of every kind (other than Contractor's Equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.

"Temporary works" means works designed, constructed, installed, and removed by the Contractor which are needed for construction or installation of the Works.

"Tender" means the Form of Tender and all other documents which the Contractor submitted with the Form of Tender, as included in the Contract.

"Tests after Completion" means the tests (if any) which are specified in the Contract and which are carried out in accordance with the Specification after the Works or a Section (as the case may be) are taken over by the Procuring Entity.

"Tests on Completion" means the tests which are specified in the Contractor agreed by both Parties or instructed as a Variation, and which are carried out under Clause 9 [Tests on Completion] before the Works or a Section (as the case may be) are taken over by the Procuring Entity.

"Time for Completion" means the time for completing the Works or a Section (as the case may be) as stated in the Special Conditions of Contract (with any extension calculated from the Commencement Date.

"Unforeseeable" means not reasonably foreseeable by an experienced contractor by the Base Date.

"Variation" means any change to the Works, which is instructed or approved as a variation under Clause 13 [Variations and Adjustments].

"Works" means the items the Procuring Entity requires the Contractor to undertake as defined in the Appendix to Conditions of Contract. "Works" may also mean the Permanent Works and the Temporary Works, or either of them as appropriate.

1.2 Interpretation

In the Contract, except where the context requires otherwise:

a) Words indicating one gender include all genders;

b) words indicating the singular also include the plural and words indicating the plural also include the singular;

c) provisions including the word “agree”, “agreed” or “agreement” require the agreement to be recorded in writing;

d) “written” or “in writing” means hand-written, type-written, printed or electronically made, and resulting in a permanent record; and

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

1.3 Communications

1.3.1 Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices, requests and discharges, these communications shall be:

a) In writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the Special Conditions of Contract; and

b) delivered, sent or transmitted to the address for the recipient's communications as stated in the Special Conditions of Contract. However:

i) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and

ii) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued.

1.3.2 Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Engineer, a copy shall be sent to the Architect or the other Party, as the case may be.

1.4 Law and Language

1.4.1 The Contract shall be governed by the laws of Kenya.

1.4.2 The ruling language ofthe Contract shall be English.

1.5 Priority of Documents

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

a) The Contract Agreement,

b) The Letter of Acceptance,

c) The Special Conditions – Part A,

d) the Special Conditions – Part B

e) the General Conditions of Contract

f) the Form of Tender,

g) the Specifications and Bills of Quantities

h) the Drawings, and

i) the Schedules and any other documents forming part of the Contract.

If an ambiguity or discrepancy is found in the documents, the Architect shall issue any necessary clarification or instruction.

1.6 Contract Agreement

The Parties shall enter into a Contract Agreement within 14 days after the Contractor receives the Contract Agreement, unless the Special Conditions establish otherwise. The Contract Agreement shall be based upon the form annexed to the Special Conditions. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Procuring Entity.

1.7 Assignment

The Contractor shall not assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, the contractor:

a) May as sign the whole or any part with the prior consent of the Procuring Entity, and

b) may, as security in favor of a bank or financial institution, assign its right to moneys due, or to become due, under the Contract.

1.8 Care and Supply of Documents

1.8.1 The Specifications and Drawings shall be in the custody and care of the Procuring Entity.Unless otherwise stated in the Contract, two copies of the Contract and of each subsequent Drawings and Bills of Quantities shall be supplied to the Contractor, who may make or request further copies at the cost of the Contractor.

1.8.2 Each of the Contractor's Documents shall be in the custody and care of the Contractor, unless and until taken over by the Procuring Entity. Unless otherwise stated in the Contract, the Contractor shall supply to the Architect two copies of each of the Contractor's Documents.

1.8.3 The Contractor shall keep, on the Site, a copy of the Contract, publications named in the Specification, the Contractor's Documents (if any), the Drawings and Variations and other communications given under the Contract. The Procuring Entity's Personnel shall have the right of access to all these documents at all reasonable times.

1.8.4 If a Party becomes aware of an error or defect in a document which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect.

1.9 Timely provision of Drawings or Instructions

1.9.1 The Contractor shall give notice to the Architect whenever the Works are likely to be delayed or disrupted if any necessary drawing or instruction is not issued to the Contractor within a particular time, which shall be reasonable. The notice shall include details of the necessary drawing or instruction, details of why and by when it should be issued, and the nature and amount of the delay or disruption likely to be suffered if it is late.

1.9.2 If the Contractor suffers delay and/or incurs Cost as a result of a failure of the Architect to issue the notified drawing or instruction within a time which is reasonable and is specified in the notice with supporting details, the Contractor shall give a further notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

b) payment of any other associated costs accrued, which shall be included in the Contract Price.

1.9.3 After receiving this further notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

1.9.4 However, if and to the extent that the Architect failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, or costs accrued.

1.10 Procuring Entity's Use of Contractor's Documents

1.10.1 As agreed between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor.

1.10.2 The Contractor shall be deemed (by signing the Contract) to give to the Procuring Entity a non-terminable transferable non-exclusive royalty-free license to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This license shall:

a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,

b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and

c) in the case of Contractor's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor.

1.10.3 The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Procuring Entity for purposes other than those permitted under Sub-Clause 1.10.2.

1.11 Contractor's Use of Procuring Entity's Documents

As agreed between the Parties, the Procuring Entity shall retain the copyright and other intellectual property rights in the Specification, the Drawings and other documents made by (or on behalf of) the Procuring Entity. The Contractor may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without the Procuring Entity's consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract.

1.12 Confidential Details

1.12.1 The Contractor's and the Procuring Entity's Personnel shall ensure confidentiality at all times. The confidentiality shall survive termination or completion of the contract. They shall disclose all such confidential and other information as may be reasonably required in order to verify compliance with the Contract and allow its proper implementation.

1.12.2 The Contractor's and the Procuring Entity's Personnel shall also treat the details of the Contract as private and confidential, except to the extent necessary to carry out their respective obligations under the Contract or to comply with applicable Laws. Each of them shall not publish or disclose any particulars of the Works prepared by the other Party without the previous agreement of the other Party. However, the Contractor shall be permitted to disclose any publicly available information, or information otherwise required to establish his qualifications to compete for other projects.

1.13 Compliance with Laws

The Contractor shall, in performing the Contract, comply with applicable Laws. Unless otherwise stated in the Special Conditions of Contract:

a) The Procuring Entity shall have obtained (or shall obtain) the planning, zoning, building permitor similar permission for the Permanent Works, and any other permissions described in the Specifications as having been (or to be) obtained by the Procuring Entity; and the Procuring Entity shall indemnify and hold the Contractor harmless against and from the consequences of any failure to do so; and

b) the Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licenses and approvals, as required by the Laws in relation to the execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Procuring Entity harmless against and from the consequences of any failure to do so, unless the Contractor is impeded to accomplish these actions and shows evidence of its diligence.

1.14 Joint and Several Liability

If the Contractor constitutes (under applicable Laws) a joint venture, consortium or other unincorporated grouping of two or more persons:

a) These persons shall be deemed to be jointly and severally liable to the Procuring Entity for the performance of the Contract;

b) these persons shall notify the Procuring Entity of their leader who shall have authority to bind the Contractor and each of these persons; and

c) the Contractor shall not alter its composition or legal status without the prior consent of the Procuring Entity.

1.15 Inspections and Audit by the Procuring Entity

Pursuant to paragraph 2.2(e). of Appendix B to the General Conditions, the Contractor shall permit and shall cause its subcontractors and sub-consultants to permit, the Public Procurement Regulatory Authority, Procuring Entity and/or persons appointed or designated by the Government of Kenya to inspect the Site and/or the accounts and records relating to the procurement process, selection and/or contract execution, and to have such accounts and records audited by auditors appointed by the Procuring Entity if requested by the Procuring Entity. The Contractor's and its Subcontractors' and sub-consultants' attention is drawn to Sub-Clause 15.6 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise of the Procuring Entity's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of in eligibility pursuant to the Procuring Entity's prevailing sanctions procedures).

2. THE PROCURING ENTITY

2.1 Right of Access to the Site

2.1.1 The Procuring Entity shall give the Contractor right of access to, and possession of, all parts of the Site within the time (or times) stated in the Special Conditions of Contract. The right and possession may not be exclusive to the Contractor. If, under the Contract, the Procuring Entity is required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Procuring Entity shall do so in the time and manner stated in the Specification. However, the Procuring Entity may withhold any such right or possession until the Performance Security has been received.

2.1.2 If no such time is stated in the Special Conditions of Contract, the Procuring Entity shall give the Contractor right of access to, and possession of, the Site within such times as required to enable the Contractor to proceed without disruption in accordance with the programme submitted under Sub-Clause 8.3 [Programme].

2.1.3 If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Procuring Entity to give any such right or possession within such time, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

b) payment of any such Cost-plus profit, which shall be included in the Contract Price.

2.1.4 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

2.1.5 However, if and to the extent that the Procuring Entity's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit.

2.2 Permits, Licenses or Approvals

2.2.1 The Procuring Entity shall provide, at the request of the Contractor, such reasonable assistance as to allow the Contractor to obtain properly:

a) Copies of the Laws of Kenya which are relevant to the Contract but are not readily available, and

b) any permits, licenses or approvals required by the Laws of Kenya:

i) which the Contractor is required to obtain under Sub-Clause 1.13 [Compliance with Laws],

ii) for the delivery of Goods, including clearance through customs, and

iii) for the export of Contractor's Equipment when it is removed from the Site.

2.3 Procuring Entity's Personnel

The Procuring Entity shall be responsible for ensuring that the Procuring Entity's Personnel and the Procuring Entity's other contractor son the Site:

a) co-operate with the Contractor's efforts under Sub-Clause 4.6 [Co-operation], and

b) take actions similar to those which the Contractor is required to take under sub-paragraphs (a), (b) and (c) of Sub-Clause 4.8 [Safety Procedures] and under Sub-Clause 4.18 [Protection of the Environment].

2.4 Procuring Entity's Financial Arrangements

The Procuring Entity shall make and maintain all necessary financial arrangements which will enable the Procuring Entity to pay the Contract Price punctually (as estimated at that time) in accordance with Clause14 [Contract Price and Payment].

3. THE ENGINEER

3.1 Architect Duties and Authority

3.1.1 The Procuring Entity shall appoint the Architect who shall carry out the duties as signed to him in the Contract. The Architect staff shall include suitably qualified Assistants and other professionals who are competent to carry out these duties. The Architect Name and Address shall be provided in the Special Conditions of Contract.

3.1.2 The Architect shall have no authority to amend the Contract.

3.1.3 The Architect May exercise the authority attributable to the Architect as specified in or necessarily to be implied from the Contract. If the Architectis required to obtain the approval of the Procuring Entity before exercising a specified authority, the requirements shall be as stated in the Special Conditions of Contract. The Procuring Entity shall promptly inform the Contractor of any change to the authority attributed to the Engineer.

3.1.4 However, whenever the Architect exercises a specified authority for which the Procuring Entity's approval is required, then (for the purposes of the Contract) the contractor shall require the Architect to provide evidence of such approval before complying with the instruction.

3.1.5 Except as otherwise stated in these Conditions:

a) Whenever carrying out duties or exercising authority, specified in or implied by the Contract, the Architect shall be deemed to act for the Procuring Entity;

b) the Architect has no authority to relieve either Party of any duties, obligations or responsibilities under the Contract;

c) any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by the Architect (including absence of disapproval) shall not relieve the Contractor from any responsibility he has under the Contract, including responsibility for errors, omissions, discrepancies and non-compliances; and

d) any act by the Architect in response to a Contractor's request shall be notified in writing to the Contractor within 14 days of receipt.

3.1.6 The following provisions shall apply:

The Architect shall obtain the specific approval of the Procuring Entity before taking action under the-following Sub-Clauses of these Conditions:

a) Sub-Clause 4.12: agreeing or determining an extension of time and/or additional cost.

b) Sub-Clause 13.1: instructing a Variation, except;

i) In an emergency situation as determined by the Engineer, or

ii) If such a Variation would increase the Accepted Contract Amount by less than the percentage specified in the Special Conditions of Contract.

c) Sub-Clause 13.3: Approving a proposal for Variation submitted by the Contractor in accordance with Sub Clause 13.1 or 13.2.

d) Sub-Clause13.4: Specifying the amount payable in each of the applicable three currencies.

3.1.7 Notwithstanding the obligation, as set out above, to obtain approval, if, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibility under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forth with comply, despite the absence of approval of the Procuring Entity, with any such instruction of the Engineer. The Architect shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 13 and shall notify the Contractor accordingly, with a copy to the Procuring Entity.

3.2 Delegation by the Engineer

3.2.1 The Architect may from time to time assign duties and delegate authority to assistants and may also revoke such assignment or delegation. These assistants may include a resident Engineer, and/or independent inspectors appointed to inspect and/ or test items of Plant and/or Materials. The assignment, delegation or revocation shall be in writing and shall not take effect until copies have been received by both Parties. However, unless otherwise agreed by both Parties, the Architect shall not delegate the authority to determine any matter in accordance with Sub-Clause 3.5 [Determinations].

3.2.2 Each assistant, to whom duties have been assigned or authority has been delegated, shall only be authorized to issue instructions to the Contractor to the extent defined by the delegation. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by an assistant, in accordance with the delegation, shall have the same effect as though the act had been an act of the Engineer. However:

a) Any failure to disapprove any work, Plant or Materials shall not constitute approval, and shall therefore not prejudice the right of the Architect to reject the work, Plant or Materials;

b) If the Contractor questions any determination or instruction of an assistant, the Contractor may refer the matter to the Engineer, who shall promptly confirm, reverse or vary the determination or instruction.

3.3 Instructions of the Engineer

3.3.1 The Architect may issue to the Contractor (at anytime) instructions and additional or modified Drawings which may be necessary for the execution of the Works and the remedying of any defects, all in accordance with the Contract. The Contractor shall only take instructions from the Engineer, or from an assistant to whom the appropriate authority has been delegated under Clause 3.2.1.

3.3.2 The Contractor shall comply with the instructions given by the Architect or delegated assistant, on any matter related to the Contract. Whenever practicable, their instructions shall be given in writing. If the Architect or a delegated assistant:

a) Gives an oral instruction,

b) receives a written confirmation of the instruction, from (or on behalf of) the Contractor, within two working days after giving the instruction, and

c) does not reply by issuing a written rejection and/or instruction within two working days after receiving the confirmation,

Then the confirmation shall constitute the written instruction of the Architect or delegated assistant (as the case may be).

3.4 Replacement of the Engineer

If the Procuring Entity intends to replace the Engineer, the Procuring Entity shall, in not less than 21 days before the intended date of replacement, give notice to the Contractor of the name, address and relevant experience of the intended person to replace the Engineer.

3.5 Determinations

3.5.1 Whenever these Conditions provide that the Architect shall proceed in accordance with this Sub-Clause3.5 to agree or determine any matter, the Architect shall consult with each Party in an endeavor to reach agreement. If agreement is not achieved, the Architect shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.

3.5.1 The Architect shall give notice to both Parties of each agree mentor determination, with supporting particulars, within 30 days from the receipt of the corresponding claim or request except when

otherwise specified. Each Party shall give effect to each agreement or determination unless and until revised under Clause 20 [Claims, Disputes and Arbitration].

4. THE CONTRACTOR

4.1 Contractor's General Obligations

4.1.1 The Contractor shall design (to the extent specified in the Contract), execute and complete the Works in accordance with the Contract and with the Architect instructions, ands hall remedy any defects in the Works.

4.1.2 The Contractor shall provide the Plant and Contractor's Documents specified in the Contract, and all Contractor's Personnel, Goods, consumables and other things and services, whether of a temporary or permanent nature, required in and for this design, execution, completion and remedying of defects.

4.1.3 All equipment, material, and services to be incorporated in or required for the Works shall have their origin in any eligible source country.

4.1.4 The Contractor shall be responsible for the adequacy, stability and safety of all Site operations and of all methods of construction. Except to the extent specified in the Contract, the Contractor (i) shall be responsible for all Contractor's Documents, Temporary Works, and such design of each item of Plant and Materials as is required for the item to be in accordance with the Contract, and (ii) shall not otherwise be responsible for the designor specification of the Permanent Works.

4.1.5 The Contractor shall, whenever required by the Engineer, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No significant alteration to these arrangements and methods shall be made without this having previously been notified to the Engineer.

4.1.6 If the Contract specifies that the Contractor shall design any part of the Permanent Works, then unless otherwise stated in the Special Conditions:

a) The Contractor shall submit to the Architect the Contractor's Documents for this part in accordance with the procedures specified in the Contract;

b) these Contractor's Documents shall be in accordance with the Specification and Drawings, shall be written in the language for communications defined in Sub-Clause 1.4 [Law and Language], and shall include additional information required by the Architect to add to the Drawings for co-ordination of each Party's designs;

c) the Contractor shall be responsible for this part and it shall, when the Works are completed, befit for such purposes for which the part is intended as are specified in the Contract; and

d) prior to the commencement of the Tests on Completion, the Contractor shall submit to the Architectthe "as-built" documents and, if applicable, operation and maintenance manuals in accordance with the Specification and in sufficient detail for the Procuring Entity to operate, maintain, dismantle, reassemble, adjust and repair this part of the Works. Such part shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections] until these documents and manuals have been submitted to the Engineer.

4.2 Performance Security

4.2.1 The Contractor shall obtain (at his cost) a Performance Security for proper performance, in the amount stated in the Special Conditions of Contract and denominated in the currency (ies) of the Contract or in a freely convertible currency acceptable to the Procuring Entity. If an amount is not stated in the Special Conditions of Contract, this Sub-Clause shall not apply.

4.2.2 The Contractor shall deliver the Performance Security to the Procuring Entity within 30 days after receiving the Notification of Award and shall send a copy to the Engineer. The Performance Security shall be issued by a reputable bank selected by the Contractor and shall be in the form annexed to the Special Conditions, as stipulated by the Procuring Entity in the Special Conditions of Contract, or in another form approved by the Procuring Entity.

4.2.3 The Contractor shall ensure that the Performance Security is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects. If the terms of the Performance Security specify its expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 30 days prior to the expiry date, the Contractor shall extend the validity of the Performance Security until the Works have been completed and any defects have been remedied.

4.2.4 The Procuring Entity shall not make a claim under the Performance Security, except for amounts to which the Procuring Entity is entitled under the Contract.

4.2.5 The Procuring Entity shall indemnify and hold the Contractor harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from a claim under the Performance Security to the extent to which the Procuring Entity was not entitled to make the claim.

4.2.6 The Procuring Entity shall return the Performance Security to the Contractor within 14 days after receiving a copy of the Taking-Over Certificate.

4.2.7 Without limitation to the provisions of the rest of this Sub-Clause, whenever the Architect determines an addition or a reduction to the Contract Price as a result of a change in cost and/ or legislation, or as a result of a Variation, amounting to more than 25 percent of the portion of the Contract Price payable in a specific currency, the Contractor shall at the Architect request promptly increase, or may decrease, as the case may be, the value of the Performance Security in that currency by an equal percentage.

4.3 Contractor's Representative

4.3.1 The Contractor shall appoint the Contractor's Representative and shall give him all authority necessary to act on the Contractor's behalf under the Contract. The Contractor's Representative's Name and Address shall be provided in the Special Conditions of Contract.

4.3.2 Unless the Contractor's Representative is named in the Contract, the Contractor shall, prior to the Commencement Date, submit to the Architect for consent the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If consent is withheld or subsequently revoked in terms of Sub-Clause 6.9 [Contractor's Personnel], or if the appointed person fails to act as Contractor's Representative, the Contractor shall similarly submit the name and particulars of another suitable person for such appointment.

4.3.3 The Contractor shall not, without the prior consent of the Engineer, revoke the appointment of the Contractor's Representative or appoint are placement.

4.3.4 The whole time of the Contractor's Representative shall be given to directing the Contractor's performance of the Contract. If the Contractor's Representative is to be temporarily absent from the Site during the execution of the Works, a suitable replacement person shall be appointed, subject to the Architect prior consent, and the Architect shall be notified accordingly.

4.3.5 The Contractor's Representative shall, on behalf of the Contractor, receive instructions under Sub-Clause 3.3 [Instructions of the Engineer].

4.3.6 The Contractor's Representative may delegate any powers, functions and authority to any competent person, and may at any time revoke the delegation. Any delegation or revocation shall not take effect until the Architect has received prior notice signed by the Contractor's Representative, naming the person and specifying the powers, functions and authority being delegated or revoked.

4.3.7 The Contractor's Representative shall be fluent in the language for communications defined in Sub-Clause1.4 [Law and Language]. If the Contractor's Representative's delegates are not fluent in the said language, the Contractor shall make competent interpreters available during all working hours in a number deemed sufficient by the Engineer.

4.4 Sub-contractors

4.4.1 The Contractor shall not subcontract the whole of the Works. The contractor may however subcontract the works as provided in Clause 34.2.

4.4.2 The Contractor shall be responsible for the acts or defaults of any Subcontractor, his agents or employees, as if they were the acts or defaults of the Contractor. Unless otherwise stated in the Special Conditions:

a) The Contractor shall not be required to obtain consent to suppliers solely of Materials, or to a subcontract for which the Subcontractor is named in the Contract;

b) The prior consent of the Procuring Entity shall be obtained to other proposed Subcontractors;

c) the Contractor shall give the Procuring Entity not less than 14 days' notice of the intended date of the commencement of each Subcontractor's work, and of the commencement of such work on the Site; and

d) each subcontract shall include provisions which would entitle the Procuring Entity to require the subcontract to be assigned to the Procuring Entity under Sub-Clause 4.5 [Assignment of Benefit of Subcontract] (if or when applicable) or in the event of termination under Sub-Clause 15.2 [Termination by Procuring Entity].

4.4.3 The Contractor shall ensure that the requirements imposed on the Contractor by Sub-Clause 1.12 [Confidential Details] apply equally to each Subcontractor.

4.4.4 Where practicable, the Contractor shall give fair and reasonable opportunity for contractors from Kenya to be appointed as Subcontractors.

4.5 Assignment of Benefit of Subcontract

If a Subcontractor's obligations extend beyond the expiry date of the relevant Defects Notification Period and the Engineer, prior to this date, instructs the Contractor to assign the benefit of such obligations to the Procuring Entity, then the Contractor shall do so. Unless otherwise stated in the assignment, the Contractor shall have no liability to the Procuring Entity for the work carried out by the Subcontractor after the assignment takes effect.

4.6 Co-operation

4.6.1 The Contractor shall, as specified in the Contract or as instructed by the Engineer, allow appropriate opportunities for carrying out work to:

a) The Procuring Entity's Personnel,

b) Any other contractors employed by the Procuring Entity, and

c) The personnel of any legally constituted public authorities, who may be employed in the execution on or near the Site of any work not included in the Contract.

4.6.2 Any such instruction shall constitute a Variation if and to the extent that it cause sthe Contractor to suffer delays and/or to incur Unforeseeable Cost. Services for these personnel and other contractors may include the use of Contractor's Equipment, Temporary Works or access arrangements which are the responsibility of the Contractor.

4.6.3 If, under the Contract, the Procuring Entity is required to give to the Contractor possession of any foundation, structure, plant or means of access in accordance with Contractor's Documents, the Contractor shall submit such documents to the Architect in the time and manner stated in the Specification.

4.7 Setting Out of the Works

4.7.1 The Contractor shall set out the Works in relation to original points, lines and levels of reference specified in the Contractor notified by the Engineer. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works.

4.7.2 The Procuring Entity shall be responsible for any errors in these specified or notified items of reference, but the Contractor shall use reasonable efforts to verify their accuracy before they are used.

4.73 If the Contractor suffers delay and/or incurs Cost from executing work which was necessitated by an error in these items of reference, and an experienced contractor could not reasonably have discovered such error and avoided this delay and/ or Cost, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

b) payment of any such costs accrued, which shall be included in the Contract Price.

4.7.4 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) whether and (if so) to what extent the error could not reasonably have been discovered, and (ii) the matters described in sub-paragraphs (a) and (b) above related to thise.

4.8 Safety Procedures

The Contractor shall:

a) Comply with all applicable safety regulations,

b) Takec are for the safety of all persons entitled to be on the Site,

c) Use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons,

d) provide fencing, lighting, guarding and watching of the Works until completion and taking over under Clause 10 [Procuring Entity's Taking Over], and

e) provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.

4.9 Quality Assurance

4.9.1 The Contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The Architect shall be entitled to audit any aspect of the system.

4.9.2 Details of all procedures and compliance documents shall be submitted to the Architectf or information before each design and execution stage is commenced. When any document of a technical nature is issued to the Engineer, evidence of the prior approval by the Contractor itself shall be apparent on the document itself.

Compliance with the quality assurance system shall not relieve the Contractor of any of his duties, obligations or responsibilities under the Contract.

4.10 Site Data

4.10.1 The Procuring Entity shall have made available to the Contractor for his information, prior to the Base Date, all relevant data in the Procuring Entity's possession on sub-surface and hydrological conditions at the Site, including environmental aspects. The Procuring Entity shall similarly make available to the Contractor all such data which come into the Procuring Entity's possession after the Base Date. The Contractor shall be responsible for interpreting all such data.

4.10.2 To the extent which was practicable (taking account of cost and time), the Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Tender or Works. To the same extent, the Contractor shall be deemed to have inspected and examined the Site, its surroundings, the above data and other available information, and to have been satisfied before submitting the Tender as to all relevant matters, including (without limitation):

a) The form and nature of the Site, including sub-surface conditions,

b) the hydrological and climatic conditions,

c) the extent and nature of the work and Goods necessary for the execution and completion of the Works and the remedying of any defects,

d) the Laws, procedures and labour practices of Kenya, and

e) the Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services.

4.11 Sufficiency of the Accepted Contract Amount

4.11.1 The Contractor shall be deemed to:

a) Have satisfied itself as to the correctness and sufficiency of the Accepted Contract Amount, and

b) have based the Accepted Contract Amount on the data, interpretations, necessary information, inspections, examinations and satisfaction as to all relevant matters referred to in Sub-Clause 4.10 [Site Data].

4.11.2 Unless otherwise stated in the Contract, the Accepted Contract Amount covers all the Contractor's obligations under the Contract (including those under Provisional Sums, if any) and all things necessary for the proper execution and completion of the Works and the remedying of any defects.

4.12 Unforeseeable Physical Conditions

4.12.1 In this Sub-Clause, "physical conditions" means natural physical conditions and man-made and other physical obstructions and pollutants, which the Contractor encounters at the Site when executing the Works, including sub-surface and hydrological conditions but excluding climatic conditions.

4.12.2 If the Contractor encounters adverse physical conditions which he considers to have been Unforeseeable, the Contractor shall give notice to the Architect as soon as practicable.

4.12.3 This notice shall describe the physical conditions, so that they can be inspected by the Architect and shall set out the reasons why the Contractor considers them to be Unforeseeable. The Contractor shall continue executing the Works, using such proper and reasonable measures as are appropriate for the physical conditions, and shall comply with any instructions which the Architect may give. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.

4.12.4 If and to the extent that the Contractor encounters physical conditions which are Unforeseeable, gives such a notice, and suffers delay and/or incurs Cost due to these conditions, the Contractor shall be entitled subject to notice under Sub-Clause 20.1 [Contractor's Claims] to:

a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

b) payment of any such Cost, which shall be included in the Contract Price.

4.12.5 Upon receiving such notice and inspecting and/or investigating these physical conditions, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) whether and (if so) to what extent these physical conditions were Unforeseeable, and (ii) the matters described in sub-paragraphs (a) and (b) above related to this extent.

4.12.6 However, before additional Cost is finally agreed or determined under sub-paragraph (ii), the Architect may also review whether other physical conditions in similar parts of the Works (if any) were more favorable than could reasonably have been foreseen when the Contractor submitted the Tender. If and to the extent that these more favorable conditions were encountered, the Architect may proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the reductions in Cost which were due to these conditions, which may be included (as deductions) in the Contract Price and Payment Certificates. However, the net effect of all adjustments under sub-paragraph (b) and all these reductions, for all the physical conditions encountered in similar parts of the Works, shall not result in a net reduction in the Contract Price.

4.12.7 The Architect shall take account of any evidence of the physical conditions foreseen by the Contractor when submitting the Tender, which shall be made available by the Contractor, but shall not be bound by the Contractor's interpretation of any such evidence.

4.13 Rights of Way and Facilities

Unless otherwise specified in the Contract the Procuring Entity shall provide effective access to and possession of the Site including special and/or temporary rights-of-way which are necessary for the Works. The Contractor shall obtain, at his risk and cost, any additional rights of way or facilities out side the Site which he may require for the purposes of the Works.

4.14 Avoidance of Interference

4.14.1 The Contractor shall not interfere unnecessarily or improperly with:

a) The convenience of the public, or

b) The access to and use and occupation of all roads and foot paths, irrespective of whether they are public or in the possession of the Procuring Entity or of others.

4.14.2 The Contractor shall indemnify and hold the Procuring Entity harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

4.15 Access Route

4.15.1 The Contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the Site at Base Date. The Contractor shall use reasonable efforts to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These efforts shall include the proper use of appropriate vehicles and routes.

4.15.2 Except as otherwise stated in these Conditions:

a) The Contractor shall (as between the Parties) be responsible for any maintenance which may be required for his use of access routes;

b) the Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of routes, signs and directions;

c) the Procuring Entity shall not be responsible for any claims which may arise from the use or otherwise of any access route;

d) the Procuring Entity does not guarantee the suitability or availability of particular access routes; and

e) Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne by the Contractor.

4.16 Transport of Goods

Unless otherwise stated in the Special Conditions:

a) the Contractor shall give the Architect not less than 21 days' notice of the date on which any Plant or a major item of other Goods will be delivered to the Site;

b) the Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works; and

c) the Contractor shall indemnify and hold the Procuring Entity harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from thetransport of Goods and shall negotiate and pay all claims arising from their transport.

4.17 Contractor's Equipment

The Contractor shall be responsible for all Contractor's Equipment. When brought on to the Site, Contractor's Equipment shall be deemed to be exclusively intended for the execution of the Works. The Contractor shall not remove from the Site any major items of Contractor's Equipment without the consent of the Engineer. However, consent shall not be required for vehicles transporting Goods or Contractor's Personnel off Site.

4.18 Protection of the Environment

4.18.1 The contractor shall comply with the applicable environmental laws, regulations and policies.

4.18.2 The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.

4.18.3 The Contractor shall ensure that emissions, surfaced is charges and effluent from the Contractor's activities shall not exceed the values stated in the Specification or prescribed by applicable Laws.

4.19 Electricity, Water and Gas

4.19.1 The Contractor shall, except as stated below, be responsible for the provision of all power, water and other services he may require for his construction activities and to the extent defined in the Specifications, for the tests.

4.19.2 The Contractor shall be entitled to use for the purposes of the Works such supplies of electricity, water, gas and other services as may be available on the Site and of which details and prices are given in the Specifications. The Contractor shall, at his risk and cost, provide any apparatus necessary for his use of these services and for measuring the quantities consumed.

4.19.3 The quantities consumed and the amounts due (at these prices) for such services shall be agreed or determined by the Architect in accordance with Sub-Clause 2.5 [Procuring Entity's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Procuring Entity.

4.20 Procuring Entity's Equipment and Free-Issue Materials

4.20.1 The Procuring Entity shall make the Procuring Entity's Equipment (if any) available for the use of the Contractor in the execution of the Works in accordance with the details, arrangements and prices stated in the Specification. Unless otherwise stated in the Specification:

a) The Procuring Entity shall be responsible for the Procuring Entity's Equipment, except that

b) the Contractor shall be responsible for each item of Procuring Entity's Equipment whilst any of the Contractor's Personnel is operating it, driving it, directing it or in possession or control of it.

4.20.1 The appropriate quantities and the amounts due (at such stated prices) for the use of Procuring Entity's Equipment shall be agreed or determined by the Architect in accordance with Sub-Clause 2.5 [Procuring Entity's Claims] and Sub-Clause3.5 [Determinations]. The Contractor shall pay these amounts to the Procuring Entity.

4.20.2 The Procuring Entity shall supply, free of charge, the "free-issue materials" (if any) in accordance with the details stated in the Specification. The Procuring Entity shall, at his risk and cost, provide these materials at the time and place specified in the Contract. The Contractor shall then visually inspect them and shall promptly give notice to the Architect of any shortage, defect or default in these materials. Unless otherwise agreed by both Parties, the Procuring Entity shall immediately rectify the notified shortage, defector default.

4.20.3 After this visual inspection, the free-issue materials shall come under the care, custody and control of the Contractor. The Contractor's obligations of inspection, care, custody and control shall not relieve the Procuring Entity of liability for any shortage, defect or default not apparent from a visual inspection.

4.21 Progress Reports

4.21.1 Unless otherwise stated in the Special Conditions, monthly progress reports shall be prepared by the Contractor and submitted to the Architect in six copies. The first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the period to which it relates.

4.21.2 Reporting shall continue until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works. Each report shall include:

a) charts and detailed descriptions of progress, including each stage of design (if any), Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection and testing; and including these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),

b) photographs showing the status of manufacture and of progress on the Site;

c) for the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of:

i) commencement of manufacture,

ii) Contractor's inspections,

iii) tests, and

iv) shipment and arrival at the Site;

d) the details described in Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment];

e) copies of quality assurance documents, test results and certificates of Materials;

f) list of notices given under Sub-Clause 2.5 [Procuring Entity's Claims] and notices given under Sub-Clause 20.1 [Contractor's Claims];

g) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and

h) comparison so factual and planned progress, with details of any events or circumstances which may jeopardize the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.

4.22 Security of the Site

Unless otherwise stated in the Special Conditions:

a) The Contractor shall be responsible for keeping unauthorized persons off the Site, and

b) authorized persons shall be limited to the Contractor's Personnel and the Procuring Entity's Personnel; and to any other personnel notified to the Contractor, by the Procuring Entity or the Engineer, as authorized personnel of the Procuring Entity's other contractors on the Site.

4.23 Contractor's Operations on Site

4.23.1 The Contractor shall confine his operations to the Site, and to any additional areas which may be obtained by the Contractor and agreed by the Architect as additional working areas. The Contractor shall take all necessary precautions to keep Contractor's Equipment and Contractor's Personnel within the Site and these additional areas, and to keep them off adjacentl and.

4.23.2 During the execution of the Works, the Contractor shall keep the Site free from all unnecessary obstruction and shall store or dispose of any Contractor's Equipment or surplus materials. The Contractor shall clear away and remove from the Site any wreckage, rubbish and Temporary Works which are no longer required.

4.23.3 Upon the issue of a Taking-Over Certificate, the Contractor shall clear away and remove, from that part of the Site and Works to which the Taking-Over Certificate refers, all Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works. The Contractor shall leave that part of the Site and the Works in a clean and safe condition. However, the Contractor may retain on Site, during the Defects Notification Period, such Goods as are required for the Contractor to fulfil obligations under the Contract.

4.24 Fossils

4.24.1 All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site shall be placed under the care and authority of the Procuring Entity. The Contractor shall take reasonable precautions to prevent Contractor's Personnel or other persons from removing or damaging any of these findings.

4.24.2 The Contractor shall, upon discovery of any such finding, promptly give notice to the Engineer, who shall issue instructions for dealing with it. If the Contractor suffers delay and/or incurs Cost from complying with the instructions, the Contractor shall give a further notice to the Architect and shall be entitled subject to Sub- Clause 20.1 [Contractor's Claims] to:

a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this further notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

5. NOMINATED SUBCONTRACTORS

5.1 Definition of "nominated Subcontractor"

In this Contract, "nominated Subcontractor" means a Subcontractor:

a) Who is nominated by the Procuring Entity, or

b) Contractor has nominated as a Subcontractor subject to Sub-Clause 5.2 [Objection to Notification].

5.2 Objection to Nomination

The Contractor shall not be under any obligation to employ a nominated Subcontractor against whom the Contractor raises reasonable objection by notice to the Procuring Entity as soon as practicable, with supporting particulars. An objection shall be deemed reasonable if it arises from (among other things) any of the following matters, unless the Procuring Entity agrees in writing to indemnify the Contractor against and from the consequences of the matter:

a) there are reasons to believe that the Subcontractor does not have sufficient competence, resources or financial strength;

b) the nominated Subcontractor does not accept to indemnify the Contractor against and from any negligence or misuse of Goods by the nominated Subcontractor, his agents and employees; or

c) the nominated Subcontractor does not accept to enter into a subcontract which specifies that, for the subcontracted work (including design, if any), the nominated Subcontractor shall:

i) undertake to the Contractor such obligations and liabilities as will enable the Contractor to discharge his obligations and liabilities under the Contract;

ii) indemnify the Contractor against and from all obligations and liabilities arising under or in connection with the Contract and from the consequences of any failure by the Subcontractor to perform these obligations or to fulfil these liabilities, and

iii) be paid only if and when the Contractor has received from the Procuring Entity payments for sums due under the Subcontract referred to under Sub-Clause 5.3 [Payment to nominated Subcontractors].

5.3 Payments to nominated Subcontractors

The Contractor shall pay to the nominated Subcontractor the amounts shown on the nominated Subcontractor's invoices approved by the Contractor which the Architect certifies to be due in accordance with the subcontract. These amounts plus other charges shall be included in the Contract Price in accordance with sub-paragraph (b) of Sub-Clause 13.5 [Provisional Sums], except as stated in Sub-Clause 5.4 [Evidence of Payments].

5.4 Evidence of Payments

5.4.1 Before issuing a Payment Certificate which includes an amount payable to a nominated Subcontractor, the Architect may request the Contractor to supply reasonable evidence that the nominated Subcontractor has received all amounts due in accordance with previous Payment Certificates, less applicable deductions for retention or otherwise. Unless the Contractor:

(a) Submits this reasonable evidence to the Engineer, or

(b) i) Satisfies the Architect in writing that the Contractor is reasonably entitled to withhold or refuse to pay these amounts, and ii) Submits to the Architect reasonable evidence that the nominated Subcontractor has been notified of the Contractor's entitlement, then the Procuring Entity

may (at his sole discretion) pay, direct to the nominated Subcontractor, part or all of such amounts previously certified (less applicable deductions) as are due to the nominated Subcontractor and for which the Contractor has failed to submit the evidence described in sub-paragraphs (a) or (b) above. The Contractor shall then repay, to the Procuring Entity, the amount which the nominated Subcontractor was directly paid by the Procuring Entity.

6. STAFF AND LABOR

6.1 Engagement of Staff and Labor

Except as otherwise stated in the Specification, the Contractor shall make arrangements for the engagement of all staff and labor, local or otherwise, and for their payment, feeding, transport, and, when appropriate, housing. The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labor with appropriate qualifications and experience from sources within Kenya.

6.2 Rates of Wages and Conditions of Labor

6.2.1 The Contractor shall pay rates of wages, and observe conditions of labor, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by Procuring Entity's whose trade or industry is similar to that of the Contractor.

6.2.2 The Contractor shall inform the Contractor's Personnel about their liability to pay personal income taxes in Kenya in respect of such of their salaries, wages, allowances and any benefits as are subject to tax under the Laws of Kenya for the time being in force, and the Contractor shall perform such duties in regard to such deductions there of as may be imposed on him by such Laws.

6.3 Persons in the Service of Procuring Entity

The Contractor shall not recruit, or attempt to recruit, staff and labour from amongst the Procuring Entity's Personnel.

6.4 Lab or Laws

The Contractor shall comply with all the relevant labour Laws applicable to the Contractor's Personnel, including Laws relating to their employment, employment of children, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights. The Contractor shall require his employees to obey all applicable Laws, including those concerning safety at work.

6.5 Working Hours

No work shall be carried out on the Site on locally recognized days of rest, or outside the normal working hours stated in the Special Conditions of Contract, unless:

a) Otherwise stated in the Contract,

b) The Architect gives consent, or

c) The work is unavoidable, or necessary for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Engineer, provided that work done outside the normal working hours shall be considered and paid for as overtime.

6.6 Facilities for Staff and Labor

Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities on site for the Contractor's Personnel. The Contractor shall also provide facilities for the Procuring Entity's Personnel as stated in the

Specifications. The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.

6.7 Health and Safety

6.7.1 The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with loca lhealth authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and ambulance service are available at all times at the Site and at any accommodation for Contractor's and Procuring Entity's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

6.7.2 The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.

6.7.3 The Contractor shall send, to the Engineer, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Architect may reasonably require.

6.7.4 The Contractor shall conduct an awareness programme on HIV and other sexually transmitted diseases via an approved service provider and shall undertake such other measures taken to reduce the risk of the transfer of these diseases between and among the Contractor's Personnel and the local community, to promote early diagnosis and to assist affected individuals.

6.8 Contractor's Superintendence

6.8.1 Throughout the execution of the Works, and as long thereafter as is necessary to fulfil the Contractor's obligations, the Contractor shall provide all necessary super intendence to plan, arrange, direct, manage, inspect and test the work.

6.8.2 Superintendence shall be given by a sufficient number of persons having adequate knowledge of the language for communications (defined in Sub-Clause 1.4 [Law and Language]) and of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

6.9 Contractor's Personnel

6.9.1 The Contractor's Personnel shall be appropriately qualified, skilled and experienced in their respective trades or occupations. The Contractors Key personnel shall be named in the Special Conditions of Contract. The Architect may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative if applicable, who:

a) Persists in any misconduct or lack of care,

b) Carries out duties in competently or negligently,

c) fails to conform with any provisions of the Contract,

d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment, or

e) based on reasonable evidence, is determined to have engaged in Fraud and Corruption during the execution of the Works.

6.9.2 If appropriate, the Contractor shall then appoint (or cause to be appointed) a suitable replacement person.

6.10 Records of Contractor's Personnel and Equipment

The Contractor shall submit, to the Engineer, details showing the number of each class of Contractor's Personnel and of each type of Contractor's Equipment on the Site. Details shall be submitted each calendar month, in a form approved by the Engineer, until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

6.11 Disorderly Conduct

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site.

6.12 Foreign Personnel

6.12.1 The Contractor shall not employ foreign personnel unless the contractor demonstrates that there are no Kenyans with the required skills.

6.12.2 The Contractor shall be responsible for the return of any foreign personnel to the place where they were recruited or to their domicile. In the event of the death in Kenya of any of these personnel or members of their families, the Contractor shall similarly be responsible for making the appropriate arrangements for their return or burial.

6.13 Supply of Water

The Contractor shall, having regard to local conditions, provide on the Sitea n adequate supply of drinking and other water for the use of the Contractor's Personnel.

6.14 Measures against Insect and Pest Nuisance

The Contractor shall at all times take the necessary precautions to protect the Contractor's Personnel employed on the Site from insect and pest nuisance, and to reduce the danger to their health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.

6.15 Alcoholic Liquor or Drugs

The Contractor shall not, otherwise than in accordance with the Laws of Kenya, onsite, import, sell, give, barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift, barter or disposal thereof by Contractor's Personnel.

6.16 Prohibition of Forced or Compulsory Labour

The Contractor shall not employ forced labor, which consists of any work or service, not voluntarily performed, that is exacted from an individual under threat of force or penalty, and includes any kind of involuntary or compulsory labor, such as indentured labor, bonded labor or similar labor-contracting arrangements.

6.17 Prohibition of Harmful Child Labor

The Contractor shall not employ children in a manner that is economically exploitative, or is likely to be hazardous, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development. Where the relevant labour laws of Kenya have provisions for employment of minors, the Contractor shall follow those laws applicable to the Contractor. Children below the age of 18 years shall not be employed in dangerous work.

6.18 Employment Records of Workers

The Contractor shall keep complete and accurate records of the employment of labour at the Site. The records shall include the names, ages, genders, hours worked and wages paid to all workers. These records shall be summarized on a monthly basis and submitted to the Engineer. These records shall be included in the details to be submitted by the Contractor under Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment].

6.19 Workers' Organizations

The Contractor shall comply with the relevant labor laws that recognize workers' rights to form and to join workers' organizations of their choosing without interference.

6.20 Non-Discrimination and Equal Opportunity

The Contractor shall base the labour employment on the principle of equal opportunity and fair treatment and shall not discriminate with respect to aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, promotion, termination of employ mentor retirement, and discipline.

7. PLANT, MATERIALS AND WORKMANSHIP

7.1 Manner of Execution

The Contractor shall carry out the manufacture/assemble of plant, the production and manufacture of Materials, and all other execution of the Works:

a) In the manner (if any) specified in the Contract,

b) in a proper workman like and careful manner, in accordance with recognized good practice, and

c) with properly equipped facilities and non-hazardous Materials, except as otherwise specified in the Contract.

7.2 Samples

The Contractor shall submit the following samples of Materials, and relevant information, to the Architect for consent prior to using the Material sin or for the Works:

a) manufacturer's standard samples of Materials and samples specified in the Contract, all at the Contractor's cost, and

b) additional samples instructed by the Architect as a Variation.

Each sample shall be labeled as to origin and intended use in the Works.

7.3 Inspection

7.3.1 The Procuring Entity's Personnel shall at all reasonable times:

a) Have full access to all parts of the Site and to all places from which natural Materials are being obtained, and

b) during production, manufacture and construction (at the Site and elsewhere), be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of manufacture of Plant and production and manufacture of Materials.

7.3.2 The Contractor shall give the Procuring Entity's Personnel full opportunity to carry out these activities, including providing access, facilities, permissions and safety equipment. No such activity shall relieve the Contractor from any obligation or responsibility.

7.3.3 The Contractor shall give notice to the Architect whenever any work is ready and before it is covered up, put out of sight, or packaged for storage or transport. The Architect shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that the Architect does not require to do so. If the Contractor fails to give the notice, he shall, if and when required by the Engineer, uncover the work and there after reinstate and make good, all at the Contractor's cost.

7.4 Testing

7.4.1 This Sub-Clause shall apply to all tests specified in the Contract.

7.4.2 Except as otherwise specified in the Contract, the Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labor, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently. The Contractor shall agree, with the Engineer, the time and placef ort he specified testing of any Plant, Materials and other parts of the Works.

7.4.3 The Architect may, under Clause 13 [Variations and Adjustments], vary the location or details of specified tests, or instruct the Contractor to carry out additional tests. If these varied or additional tests show that the tested Plant, Materials or workmanship is not in accordance with the Contract, the cost of carrying out this Variation shall be borne by the Contractor, not withstanding other provisions of the Contract.

7.4.4 The Architect shall give the Contractor not less than 24 hours' notice of the Architect intention to attend the tests. If the Architect does not attend at the time and place agreed, the Contractor may proceed with the tests, unless otherwise instructed by the Engineer, and the tests shall then be deemed to have been made in the Architect presence.

7.4.5 If the Contractor suffers delay and/ or incurs Cost from complying with these instructions or as a result of a delay for which the Procuring Entity is responsible, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

b) payment of any such Cost-plus profit, which shall be included in the Contract Price.

7.4.6 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

7.4.7 The Contractor shall promptly forward to the Architect duly certified reports of the tests. When the specified tests have been passed, the Architect shall endorse the Contractor's test certificate, or issue a certificate to him, to that effect. If the Architect has not attended the tests, he shall be deemed to have accepted the readings as accurate.

7.5 Rejection

7.5.1 If, as a result of an examination, inspection, measurement or testing, any Plant, Materials or workmanship is found to be defective or otherwise not in accordance with the Contract, the Architect may reject the Plant, Materials or workmanship by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the defect and ensure that the rejected item complies with the Contract.

7.5.2 If the Architect requires this Plant, Materials or workmanship to be retested, the tests shall be repeated under the same terms and conditions. If the rejection and retesting cause the Procuring Entity to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [Procuring Entity's Claims] pay these costs to the Procuring Entity.

7.6 Remedial Work

7.6.1 Notwithstanding any previous test or certification, the Architect may instruct the Contractorto:

a) Remove from the Site and replace any Plant or Materials which is not in accordance with the Contract,

b) remove and re-execute any other work which is not in accordance with the Contract, and

c) execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseen able event or otherwise.

7.6.2 The Contractor shall comply with the instruction within a reasonable time, which shall be the time (if any) specified in the instruction, or immediately if urgency is specified under sub-paragraph (c).

7.6.3 If the Contractor fails to comply with the instruction, the Procuring Entity shall be entitled to employ and pay other persons to carry out the work. Except to the extent that the Contractor would have been entitled to payment for the work, the Contractor shall subject to Sub-Clause 2.5 [Procuring Entity's Claims] pay to the Procuring Entity all costs arising from this failure.

7.6.4 If the contractor repeatedly delivers defective work, the Procuring Entity may consider termination in accordance with Clause 15.

7.7 Ownership of Plant and Materials

Except as otherwise provided in the Contract, each item of Plant and Materials shall become the property of the Procuring Entity at whichever is the earlier of the following times, free from liens and other encumbrances:

a) When it is incorporated in the Works;

b) when the Contractor is paid the corresponding value of the Plant and Materials under Sub-Clause 8.10 [Payment for Plant and Materials in Event of Suspension].

7.8 Royalties

Unless otherwise stated in the Specification, the Contractor shall pay all royalties, rents and other payments for:

a) Natural materials obtained from outside the Site, and

b) the disposal of material from demolitions and excavations and of other surplus material (whether natural or man-made), except to the extent that disposal are as within the Site are specified in the Contract.

8. COMMENCEMENT, DELAYS AND SUSPENSION

8.1 Commencement of Works

8.1.1 Except as otherwise specified in the Special Conditions of Contract, the Commencement Date shall be the date at which the following precedent condition shave all been fulfilled and the Architect notification recording the agreement of both Parties on such fulfilment and instructing to commence the Work is received by the Contractor:

a) Signature of the Contract Agreement by both Parties, and if required, approval of the Contract by relevant authorities of Kenya;

b) except if otherwise specified in the Special Conditions of Contract, effective access to and possession of the Site given to the Contractor together with such permission(s) under (a) of Sub-Clause 1.13 [Compliance with Laws] as required for the commencement of the Works.

c) Receipt by the Contractor of the Advance Payment under Sub-Clause 14.2 [Advance Payment] provided that the corresponding bank guarantee has been delivered by the Contractor.

8.1.2 If the said Architect instruction is not received by the Contractor within 180 days from his receipt of the Letter of Acceptance, the Contractor shall be entitled to terminate the Contract under Sub-Clause1 6.2 [Termination by Contractor].

8.1.3 The Contractor shall commence the execution of the Works as soon as is reasonably practicable after the Commencement Date and shall then proceed with the Works with due expedition and without delay.

8.2 Time for Completion

The Contractor shall complete the whole of the Works, and each Section (if any), within the Time for Completion for the Works or Section (as the case may be), including:

a) Achieving the passing of the Tests on Completion, and

b) completing all work which is stated in the Contract as being required for the Works or Section to be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections].

8.3 Programme

8.3.1 The Contractor shall submit a detailed time programme to the Architect within1 4 days after receiving the notice under Sub-Clause 8.1 [Commencement of Works]. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor's obligations. Each programme shall include:

a) The order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design (if any), Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing,

b) each of these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),

c) the sequence and timing of inspections and tests specified in the Contract, and

d) a supporting report which includes:

i) a general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works, and

ii) details showing the Contractor's reasonable estimate of the number of each class of Contractor's Personnel and of each type of Contractor's Equipment, required on the Site for each major stage.

8.3.2 Unless the Engineer, within 14 days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Procuring Entity's Personnel shall be entitled to rely upon the programme when planning their activities.

8.3.3 The Contractor shall promptly give notice to the Architect of specific probable future events or circumstances which may adversely affect the work, increase the Contract Price or delay the execution of the Works.

8.3.4 If, at anytime, the Architect gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contractor to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Architect in accordance with this Sub-Clause.

8.4 Extension of Time for Completion

8.4.1 The Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to an extension of the Time for Completion if and to the extent that completion for the purposes of Sub-Clause 10.1 [Taking Over of the Works and Sections] is or will be delayed by any of the following causes:

a) a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.3 [Variation Procedure]) or other substantial change in the quantity of an item of work included in the Contract,

b) a cause of delay giving an entitlement to extension of time under a Sub-Clause of these Conditions,

c) exceptionally adverse climatic conditions,

d) Unforeseeable shortages in the availability of personnel or Goods caused by epidemic or governmental actions, or

e) any delay, impediment or prevention caused by or attributable to the Procuring Entity, the Procuring Entity's Personnel, or the Procuring Entity's other contractors.

8.4.2 If the Contractor considers itself to be entitled to an extension of the Time for Completion, the Contractor shall give notice to the Architect in accordance with Sub-Clause 20.1 [Contractor's Claims]. When determining each extension of time under Sub-Clause 20.1, the Architec tshall review previous determinations and may increase, but shall not decrease, the total extension of time.

8.5 Delays Caused by Authorities

If the following conditions apply, namely:

a) The Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities in Kenya,

b) These authorities delay or disrupt the Contractor's work, and

c) the delay or disruption was Unforeseeable, then this delay or disruption will be considered as a cause of delay under sub-paragraph (b) of Sub-Clause 8.4 [Extension of Time for Completion].

8.6 Rate of Progress

8.6.1 If, at anytime:

a) Actual progress is too slow to complete within the Time for Completion, and/or

b) Progress has fallen (or will fall) behind the current programme under Sub-Clause 8.3 [Programme], other than as a result of a cause listed in Sub-Clause 8.4 [Extension of Time for Completion], then the Architect may instruct the Contractor to submit, under Sub-Clause 8.3 [Programme], a revised programme and supporting report describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete within the Time for Completion.

8.6.2 Unless the Architect notifies otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Contractor's Personnel and/or Goods, at the risk and cost of the Contractor. If these revised methods cause the Procuring Entity to incur additional costs, the Contractor shall subject to notice under Sub-Clause 2.5 [Procuring Entity's Claims] pay these costs to the Procuring Entity, in addition to delay damages (if any) under Sub-Clause 8.7 below.

8.6.3 Additional costs of revised methods including acceleration measures, instructed by the Architect to reduce delays resulting from causes listed under Sub-Clause 8.4 [Extension of Time for Completion] shall be paid by the Procuring Entity, without generating, however, any other additional payment benefit to the Contractor.

8.7 Delay Damages

8.7.1 If the Contractor fails to comply with Sub-Clause 8.2 [Time for Completion], the Contractor shall subject to notice under Sub-Clause 2.5 [Procuring Entity's Claims] pay delay damages to the Procuring Entity for this default. These delay damages shall be the sum stated in the Special Conditions of Contract, which shall be paid for everyday which shall elapse between the relevant Time for Completion and the date stated in the taking-Over Certificate. However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages (if any) stated in the Special Conditions of Contract.

8.7.2 These delay damages shall be the only damages due from the Contractor for such default, other than in the event of termination under Sub-Clause 15.2 [Termination by Procuring Entity] prior to completion of the Works. These damages shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under the Contract.

8.8 Suspension of Work

8.8.1 The Architect may at anytime instruct the Contractor to suspend progress of part or all of the Works. During such suspension, the Contractor shall protect, store and secure such part or the Works a gainst any deterioration, loss or damage.

8.8.2 The Architect may also notify the cause for the suspension. If and to the extent that the cause is notified and is the responsibility of the Contractor, the following Sub-Clauses 8.9, 8.10 and 8.11 shall not apply.

8.9 Consequences of Suspension

8.9.1 If the Contractor suffers delay and/or incurs Cost from complying with the Architect instructions under Sub- Clause 8.8 [Suspension of Work] and/or from resuming the work, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

b) Payment of any such Cost, which shall be included in the Contract Price.

8.9.2 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause3.5 [Determinations] to agree or determine these matters.

8.9.3 The Contractor shall not be entitled to an extension of time for, or to payment of the Cost incurred in, making good the consequences of the Contractor's faulty design, workmanship or materials, or of the Contractor's failure to protect, store or secure in accordance with Sub-Clause 8.8 [Suspension of Work].

8.10 Payment for Plant and Materials in Event of Suspension

The Contractor shall be entitled to payment of the value (as at the date of suspension) of Plant and/ or Materials which have not been delivered to Site, if:

a) The work on Plant or delivery of Plant and/ or Materials has been suspended for more than 30 days, and

b) the Contractor has marked the Plant and/or Materials as the Procuring Entity's property in accordance with the Architect instructions.

8.11 Prolonged Suspension

If the suspension under Sub-Clause 8.8 [Suspension of Work] has continued for more than 84 days, the Contractor may request the Architect permission to proceed. If the Architect does not give permission within 30 days after being requested to do so, the Contractor may, by giving notice to the Engineer, treat the suspension as an omission under Clause 13 [Variations and Adjustments] of the affected part of the Works. If the suspension affects the whole of the Works, the Contractor may give notice of termination under Sub-Clause 16.2 [Termination by Contractor].

8.12 Resumption of Work

After the permission or instruction to proceed is given, the Contractor and the Architect shall jointly examine the Works and the Plant and Materials affected by the suspension. The Contractor shall make good any deterioration or defect in or loss of the Works or Plant or Materials, which has occurred during the suspension after receiving from the Architect an instruction to this effect under Clause 13 [Variations and Adjustments].

9. TESTS ON COMPLETION

9.1 Contractor's Obligations

9.1.1 The Contractor shall carry out the Tests on Completion in accordance with this Clause and Sub-Clause 7.4 [Testing], after providing the documents in accordance with sub-paragraph (d) of Sub-Clause 4.1 [Contractor's General Obligations].

9.1.2 The Contractor shall give to the Architect not less than 21 days' notice of the date after which the Contractor will be ready to carry out each of the Tests on Completion. Unless otherwise agreed, Tests on Completion shall be carried out within 14 days after this date, on such day or days as the Architect shall instruct.

9.1.3 In considering the results of the Tests on Completion, the Architect shall make allowances for the effect of any use of the Works by the Procuring Entity on the performance or other characteristics of the Works. As soon as the Works, or a Section, have passed any Tests on Completion, the Contractor shall submit a certified report of the results of these Tests to the Engineer.

9.2 Delayed Tests

9.2.1 If the Tests on Completion are being unduly delayed by the Procuring Entity, Sub-Clause 7.4 [Testing] (fifth paragraph) and/ or Sub-Clause 10.3 [Interference with Tests on Completion] shall be applicable.

9.2.2 If the Tests on Completion are being unduly delayed by the Contractor, the Architect may by notice require the Contractor to carry out the Tests within 21 days after receiving the notice. The Contractor shall carry out the Tests on such day or days within that period as the Contractor may fix and of which he shall give notice to the Engineer.

9.2.3 If the Contractor fails to carryout the Tests on Completion within the period of 21 days, the Procuring Entity's Personnel may proceed with the Test sat the risk and cost of the Contractor. The Tests on Completion shall then be deemed to have been carried out in the presence of the Contractor and the results of the Tests shall be accepted as accurate.

9.3 Retesting of related works

If the Works, or a Section, fail to pass the Tests on Completion, Sub-Clause 7.5 [Rejection] shall apply, and the Architect or the Contractor may require the failed Tests, and Tests on Completion on any related work, to be repeated under the same terms and conditions.

9.4 Failure to Pass Tests on Completion

9.4.1 If the Works, or a Section, fail to pass the Tests on Completion repeated under Sub-Clause 9.3 [Retesting], the Architect shall be entitled to:

a) Order further repetition of Tests on Completion under Sub-Clause 9.3; or

b) if the failure deprives the Procuring Entity of substantially the whole benefit of the Works or Section, reject the Works or Section (as the case may be), in which event the Procuring Entity shall have the same remedies as are provided in sub-paragraph (c) of Sub-Clause1 1.4 [Failure to Remedy Defects].

10. PROCURING ENTITY'S TAKING OVER

10.1 Taking Over of the Works and Sections

10.1.1 Except as stated in Sub-Clause 9.4 [Failure to Pass Tests on Completion], the Works shall be taken over by the Procuring Entity when (i) the Works have been completed in accordance with the Contract, including the matters described in Sub-Clause 8.2 [Time for Completion] and except as allowed in sub-paragraph (a) below, and (ii) a Taking-Over Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause.

10.1.2 The Contractor may apply by notice to the Architect for a Taking-Over Certificate not earlier than 14 days before the Works will, in the Contractor's opinion, be complete and ready for taking over. If the Works are divided into Sections, the Contract or may similarly apply for a Taking-Over Certificate for each Section.

10.1.3 The Architect shall, within 30 days after receiving the Contractor's application:

a) Issue the Taking-Over Certificate to the Contract or, stating the date on which the Works or Section were completed in accordance with the Contract, except for any minor out standing work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied); or

b) reject the application, giving reasons and specifying the work required to be done by the Contractor to enable the Taking-Over Certificate to be issued. The Contractor shall then complete this work before issuing a further notice under this Sub-Clause.

10.1.4 If the Architect fails either to issue the Taking-Over Certificate or to reject the Contractor's application within the period of 30 days, and if the Works or Section (as the case may be) are substantially in accordance with the Contract, the Taking-Over Certificate shall be deemed to have been issued on the last day of that period.

10.2 Taking Over of Parts of the Works

10.2.1 The Architect may, at the sole discretion of the Procuring Entity, issue a Taking-Over Certificate for any part of the Permanent Works.

10.2.2 The Procuring Entity shall not use any part of the Works (other than as a temporary measure which is either specified in the Contract or agreed by both Parties) unless and until the Architect has issued a Taking-Over Certificate for this part. However, if the Procuring Entity does use any part of the Works before the Taking-Over Certificate is issued:

a) The part which is used shall be deemed to have been taken over as from the date on which it is used,

b) the Contractor shall cease to be liable for the care of such part as from this date, when responsibility shall pass to the Procuring Entity, and

c) if requested by the Contractor, the Architect shall issue a Taking-Over Certificate for this part.

10.2.3 After the Architect has issued a Taking-Over Certificate for a part of the Works, the Contractor shall be given the earliest opportunity to take such steps as may be necessary to carry out any outstanding Tests on Completion. The Contractor shall carry out these Tests on Completion as soon as practicable before the expiry date of the relevant Defects Notification Period.

10.2.4 If the Contractor incurs Cost as a result of the Procuring Entity taking over and/or using a part of the Works, other than such use as is specified in the Contractor agreed by the Contractor, the Contractor shall (i) give notice to the Architect and (ii) be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to payment of any such accrued costs, which shall be included in the Contract Price. After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this accrued cost.

10.2.5 If a Taking-Over Certificate has been issued for a part of the Works (other than a Section), the delay damages thereafter for completion of the remainder of the Works shall be reduced. Similarly, the delay damages for the remainder of the Section (if any) in which this part is included shall also be reduced. For any period of delay after the date stated in this Taking-Over Certificate, the proportional reduction in these delay damages shall be calculated as the proportion which the value of the part so certified bears to the value of the Works or Section (as the case may be) as a whole. The Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these proportions. The provisions of this paragraph shall only apply to the daily rate of delay damages under Sub-Clause 8.7 [Delay Damages] and shall not affect the maximum amount of these damages.

10.3 Interference with Tests on Completion

10.3.1 If the Contractor is prevented, for more than 14 days, from carrying out the Tests on Completion by a cause for which the Procuring Entity is responsible, the Procuring Entity shall be deemed to have taken over the Works or Section (as the case may be) on the date when the Tests on Completion would otherwise have been completed.

10.3.2 The Architect shall then issue a Taking-Over Certificate accordingly, and the Contractor shall carry out the Tests on Completion as soon as practicable, before the expiry date of the Defects Notification Period. The Architect shall require the Tests on Completion to be carried out by giving 14 days' notice and in accordance with the relevant provisions of the Contract.

10.3.3 If the Contractor suffers delay and/or incurs Cost as a result of this delay in carrying out the Tests on Completion, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

b) payment of any such accrued costs, which shall be included in the Contract Price.

10.3.4 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

10.4 Surfaces Requiring Reinstatement

Except as otherwise stated in a Taking-Over Certificate, a certificate for a Section or part of the Works shall not be deemed to certify completion of any ground or other surfaces requiring reinstatement.

11. DEFECTS LIABILITY

11.1 Completion of Outstanding Work and Remedying Defects

11.1.1 In order that the Works and Contractor's Documents, and each Section, shall be in the condition required by the Contract (fair wear and tear excepted) by the expiry date of the relevant Defects Notification Period or as soon as practicable there after, the Contractor shall:

a) complete any work which is outstanding on the date stated in a Taking-Over Certificate, within such reasonable time as is instructed by the Engineer, and

b) execute all work required to remedy defects or damage, as may be notified by (or on behalf of) the Procuring Entity on or before the expiry date of the Defects Notification Period for the Works or Section (as the case may be).

11.1.2 If a defect appears or damage occurs, the Contractor shall be notified accordingly by the Engineer.

11.2 Cost of Remedying Defects

11.2.1 All work referred to in sub-paragraph (b) of Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects] shall be executed at the risk and cost of the Contractor, if and to the extent that the work is attributable to:

a) Any design for which the Contractor is responsible,

b) Plant, Materials or workmanship not being in accordance with the Contract, or

c) Failure by the Contractor to comply with any other obligation.

11.2.2 If and to the extent that such work is attributable to any other cause, the Contractor shall be notified promptly by (or on behalf of) the Procuring Entity, and Sub-Clause 13.3 [Variation Procedure] shall apply.

11.3 Extension of Defects Notification Period

11.3.1 The Procuring Entity shall be entitled subject to Sub-Clause 2.5 [Procuring Entity's Claims] to an extension of the Defects Notification Period for the Works or a Section if and to the extent that the Works, Section or a major item of Plant (as the case may be, and after taking over) cannot be used for the purposes for which they are intended by reason of a defect or by reason of damage attributable to the Contractor. However, a Defects Notification Period shall not be extended by more than two years.

11.3.2 If delivery and/ or erection of Plant and/ or Materials was suspended under Sub-Clause 8.8 [Suspension of Work] or Sub-Clause 16.1 [Contractor's Entitlement to Suspend Work], the Contractor's obligations under this Clause shall not appl yto any defectsor damage occurring more than two years after the Defects Notification Period for the Plant and/ or Materials would otherwise have expired.

11.4 Failure to Remedy Defects

11.4.1 If the Contractor fails to remedy any defect or damage within a reasonable time, a date may be fixed by the Engineer, on or by which the defect or damage is to be remedied. The Contractor shall be given reasonable notice of this date.

11.4.2 If the Contractor fails to remedy the defect or damage by this notified date and this remedial work was to be executed at the cost of the Contractor under Sub-Clause 11.2[Costo f Remedying Defects], the Procuring Entity may (at his option):

(a) Carry out the work itself or by others, in a reasonable manner and at the Contractor's cost, but the Contractor shall have no responsibility for this work; and the Contractor shall subject to Sub-Clause

2.5 [Procuring Entity's Claims] pay to the Procuring Entity the costs reasonably incurred by the Procuring Entity in remedying the defect or damage;

(b) Require the Architect to agree or determine a reasonable reduction in the Contract Price in accordance with Sub-Clause 3.5 [Determinations]; or

(c) if the defect or damage deprives the Procuring Entity of substantially the whole benefit of the Works or any major part of the Works, terminate the Contractas a whole, or in respect of such major part which cannot be put to the intended use. Without prejudice to any other rights, under the Contractor otherwise, the Procuring Entity shall then be entitled to recover all sums paid for the Works or for such part (as the case may be), plus financing costs and the cost of dismantling the same, clearing the Site and returning Plant and Materials to the Contractor.

11.5 Removal of Defective Work

If the defector damage cannot be remedied expeditiously on the Site and the Procuring Entity gives consent, the Contractor may remove from the Site for the purposes of repair such items of Plant as are defective or damaged. This consent may require the Contractor to increase the amount of the Performance Security by the full replacement cost of these items, or to provide other appropriate security.

11.6 Further Tests

11.6.1 If the work of remedying of any defector damage may affect the performance of the Works, the Architect may require the repetition of any of the tests described in the Contract. The requirement shall be made by notice within 14 days after the defect or damage is remedied.

11.6.2 These tests shall be carried out in accordance with the terms applicable to the previous tests, except that they shall be carried out at the risk and cost of the Party liable, under Sub-Clause 11.2 [Cost of Remedying Defects], for the cost of the remedial work.

11.7 Right of Access

Until the Completion Certificate has been issued, the Contractor shall have such right of access to the Works as is reasonably required in order to comply with this Clause, except as may be inconsistent with the Procuring Entity's reasonable security restrictions.

11.8 Contractor to Search

The Contractor shall, if required by the Engineer, search for the cause of any defecton parts of the works that have already accepted, under the direction of the Engineer. Unless the defect is to be remedied at the cost of the Contractor under Sub-Clause 11.2 [Cost of Remedying Defects], the Cost of the search plus profit shall be agreed or determined by the Architect in accordance with Sub-Clause 3.5 [Determinations] and shall be included in the Contract Price.

11.9 Completion Certificate

11.9.1 Performance of the Contractor's obligations shall not be considered to have been completed until the Architect has issued the Completion Certificate to the Contractor, stating the date on which the Contractor completed his obligations under the Contract.

11.9.2 The Architect shall issue the Completion Certificate within 30days after the latest of the expiry dates of the Defects Liability Period, or as soon there after as the Contractor has supplied all the Contractor's Documents and completed and tested all the Works, including remedying any defects. A copy of the Completion Certificate shall be issued to the Procuring Entity.

11.9.3 Only the Completion Certificate shall be deemed to constitute acceptance of the Works.

11.10 Unfulfilled Obligations

After the Completion Certificate has been issued, each Party shall remain liable for the fulfilment of any obligation which remains unperformed at that time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force.

11.11 Clearance of Site

11.11.1 Upon receiving the Completion Certificate, the Contractor shall remove any remaining Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works from the Site.

11.11.2 If all these items have not been removed within 30 days after receipt by the Contractor of the Completion Certificate, the Procuring Entity may sell or otherwise dispose of any remaining items. The Procuring Entity shall be entitled to be paid the costs incurred in connection with, or attributable to, such sale or disposal and restoring the Site.

11.11.3 Any balance of the moneys from the sale shall be paid to the Contractor. If these moneys are less than the Procuring Entity's costs, the Contractor shall pay the outstanding balance to the Procuring Entity.

12. MEASUREMENT AN DEVALUATION

12.1 Works to be Measured

12.1.1 The Works shall be measured, and valued for payment, in accordance with this Clause. The Contractor shall show in each application under Sub-Clauses 14.3 [Application for Interim Payment Certificates], 14.10 [Statement on Completion] and 14.11 [Application for Final Payment Certificate] the quantities and other particulars detailing the amounts which he considers to be entitled under the Contract.

12.1.2 Whenever the Architect requires any part of the Works to be measured, reasonable notice shall be given to the Contractor's Representative, who shall:

a) promptly either attend or send another qualified representative to assist the Architect in making the measurement, and

b) supply any particulars requested by the Engineer.

12.1.3 If the Contractor fails to attend or send a representative, the measurement made by the Architect shall be accepted as accurate.

12.1.4 Except as otherwise stated in the Contract, wherever any Permanent Works are to be measured from records, these shall be prepared by the Engineer. The Contractor shall, as and when requested, attend to examine and agree the records with the Engineer, and shall sign the same when agreed. If the Contractor does not attend, the records shall be accepted as accurate.

12.1.5 If the Contractor examines and disagrees the records, and/ or does not sign them as agreed, then the Contractor shall give notice to the Architect of the respects in which the records are asserted to be inaccurate. After receiving this notice, the Architect shall review the records and either confirm or vary them and certify the payment of the undisputed part. If the Contractor does not so give notice to the Architect within 14 days after being requested to examine the records, they shall be accepted as accurate.

12.2 Method of Measurement

Except as otherwise stated in the Contract:

a) Measurement shall be made of the net actual quantity of each item of the Permanent Works, and

b) the method of measurement shall be in accordance with the Bill of Quantities or other applicable Schedules.

12.3 Evaluation

12.3.1 Except as otherwise stated in the Contract, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the value of workd one by evaluating each item of work, applying the measurement agreed or determined in accordance with the above Sub-Clauses 12.1 and 12.2 and the appropriate rate or price for the item.

12.3.2 For each item of work, the appropriate rate or price for the item shall be the rate or price specified for such item in the Contractor, if there is no such item, specified for similar work.

12.3.3 Any item of work included in the Bill of Quantities for which no rate or price was specified shall be considered as included in other rates and prices in the Bill of Quantities and will not be paid for separately.

12.3.4 However, for a new item of work, a new rate or price shall be appropriate for such item of work if:

a) The work is instructed under Clause13 [Variations and Adjustments],

b) no rate or price is specified in the Contract for this item, and

c) no specified rate or price is appropriate because the item of work is not of similar character, or is not executed under similar conditions, as any item in the Contract.

12.3.5 Each new rate or price shall be derived from any relevant rates or prices in the Contract. If no rates or prices are relevant for the new item of work, it shall be derived from the reasonable Cost of executing such work, prevailing market rates, together with profit, taking account of any other relevant matters.

12.3.6 Until such time as an appropriate rate or price is agreed or determined, the Architect shall determine a provisional rate or price for the purposes of Interim Payment Certificates as soon as the concerned work commences.

12.3.7 Where the contract price is different from the corrected tender price, in order to ensure the contractor is not paid less or more relative to the contract price (which would be the tender price), payment valuation certificates and variation orders on omissions and additions valued based on rates in the Bill of Quantities or schedule of rates in the Tender, will be adjusted by a plus or minus percentage. The percentage already worked out during tender evaluation is worked out as follows: (corrected tender price– tender price)/ tender price X 100.

12.4 Omissions

Whenever the omission of any work forms part (or all) of a Variation, the value of which has not been agreed, if:

a) The Contractor will incur (or has incurred) cost which, if the work had not been omitted, would have been deemed to be covered by a sum forming part of the Accepted Contract Amount;

b) The omission of the work will result (or has resulted) in this sum not forming part of the Contract Price; and

c) this cost is not deemed to be included in the evaluation of any substituted work; then the Contractor shall give notice to the Architect accordingly, with supporting particulars. Upon receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this cost, which shall be included in the Contract Price.

13. VARIATIONS AND ADJUSTMENTS

13.1 Right to Vary

13.1.1 Variations may be initiated by the Architect at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by a request for the Contractor to submit a proposal. No Variation instructed by the Architect under this Clause shall in any way vitiate or in validate the Contract.

13.1.2 The Contractor shall execute and be bound by each Variation, unless the Contractor promptly gives notice to the Architect stating (with supporting particulars) that (i) the Contractor cannot readily obtain the Goods required for the Variation, or (ii) such Variation triggers a substantial change in the sequence or progress of the Works. Upon receiving this notice, the Architect shall cancel, confirm or vary the instruction.

13.1.3 Each Variation may include:

a) changes to the quantities of any item of work included in the Contract (however, such changes do not necessarily constitute a Variation),

b) changes to the quality and other characteristics of any item of work,

c) changes to the levels, positions and/ or dimensions of any part of the Works,

d) omission of any work unless it is to be carried out by others,

e) any additional work, Plant, Materials or services necessary for the Permanent Works, including any associated Tests on Completion, boreholes and other testing and exploratory work, or

f) changes to the sequence or timing of the execution of the Works.

13.1.4 The Contractor shall not make any alteration and/or modification of the Permanent Works, unless and until the Architect instructs after obtaining approval of the Procuring Entity.

13.2. Variation Order Procedure

13.2.1 Prior to any Variation Order under Sub-Clause 13.1.4 the Architect shall notify the Contractor of the nature and form of such variation. As soon as possible after having received such notice, the Contractor shall submit to the Engineer:

a) A description of work, if any, to be performed and a programme for its execution, and

b) the Contractor's proposals for any necessary modifications to the Programme according to Sub-Clause 8.3 or to any of the Contractor's obligations under the Contract, and

c) the Contractor's proposals for adjustment to the Contract Price.

Following the receipt of the Contractor's submission the Architect shall, after due consultation with the Employer and the Contractor, decide as soon as possible whether or not the variation shall be carried out. If the Architect decides that the variation shall be carried out, he shall issue a Variation Order clearly identified as such in accordance with the Contractor's submission or as modified by agreement.

If the Architect and the Contractor are unable to agree the adjustment of the Contract Price, the provisions of Sub-Clause 13.2.2 shall apply.

13.2.2 Disagreement on Adjustment of the Contract Price

If the Contractor and the Architecture unable to agree on the adjustment of the Contract Price, the adjustment shall be determined in accordance with the rates specified in the Bills of Quantities or Schedule of Daywork Prices. If the rates contained in the Bills of Quantities or Dayworks Prices are not directly applicable to the specific work in question, suitable rates shall be established by the Architect reflecting the level of pricing in the Dayworks Prices. Where rates are not contained in the said Prices, the amount shall be such as is in all the circumstances reasonable, reflecting a market

price. Due account shall be taken of any over-or under-recovery of overheads by the Contractor in consequence of the variation. The Contractor shall also be entitled to be paid:

a) The cost of any partial execution of the Work srendered useless by any such variation,

b) The cost of making necessary alterations to Plant already manufactured or in the course of manufacture or of any work done that has to be altered in consequence of such a variation,

c) any additional costs incurred by the Contractor by the disruption of the progress of the Works as detailed in the Programme, and

d) the net effect of the Contractor's finance costs, including interest, caused by the variation.

The Architect shall on this basis determine the rates or prices to enable on-account payment to be included in certificates of payment.

13.2.3 Contractor to Proceed

On receipt of a Variation Order, the Contractor shall forth with proceed to carry out the variation and be bound to these Conditions in so doing as if such variation was stated in the Contract. The work shall not be delayed pending the granting of an extension of the Time for Completion or an adjustment to the Contract Price under Sub-Clause31.3.

13.3 Value Engineering

13.3.1 The Contractor may, at anytime, submit to the Architect written proposal which (in the Contractor's opinion) will, if adopted, (i) accelerate completion, (ii) reduce the cost to the Procuring Entity of executing, maintaining or operating the Works, (iii) improve the efficiency or value to the Procuring Entity of the completed Works, or (iv) otherwise be of benefit to the Procuring Entity.

13.3.2 The proposal shall be prepared at the cost of the Contractor and shall include the items listed in Sub-Clause 13.3 [Variation Procedure].

13.2.3 If a proposal, which is approved by the Engineer, includes a change in the design of part of the Permanent Works, then unless otherwise agreed by both Parties:

a) The Contractor shall design this part,

b) sub-paragraphs (a) to (d) of Sub-Clause 4.1 [Contractor's General Obligations] shall apply, and

c) if this change results in a reduction in the contract value of this part, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine a fee, which shall be included in the Contract Price. This fee shall behalf (50%) of the difference between the following amounts:

i) such reduction in contract value, resulting from the change, excluding adjustments under Sub-Clause 13.8 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost], and

ii) the reduction (if any) in the value to the Procuring Entity of the varied works, taking account of any improvement in quality, anticipated life or operational efficiencies.

13.3.4 However, if the amount established in item 13.2.3 (c) (i) is less than amount established in item 13.2.3 (c (ii), there shall not be a fee. However, if the if the amount established in item 13.2.3 (c) (i) is more than amount established in item 13.2.3 (c (ii), it shall result in a price variation to the Procuring Entity.

13.4 Variation Procedure for Value Engineering proposal

13.4.1 If the Architect requests a proposal, prior to instructing a Variation, the Contractor shall respond in writing as soon as practicable, either by giving reasons why he cannot comply (if this is the case) or by submitting:

a) A description of the proposed work to be performed and a programme for its execution,

b) the Contractor's proposal for any necessary modifications to the programme according to Sub-Clause 8.3 [Programme] and to the Time for Completion, and

c) the Contractor's proposal for evaluation of the Variation.

13.4.2 The Architect shall, as soon as practicable after receiving such proposal (under Sub-Clause 13.2 [Value Project Engineering] or otherwise), respond with approval, disapproval or comments. The Contractor shall not delay any work whilst a waiting a response.

13.4.3 Each instruction to execute a Variation, with any requirements for the recording of Costs, shall be issued by the Architect to the Contractor, who shall acknowledge receipt.

13.4.4 Each Variation shall be evaluated in accordance with Clause 12 [Measurement and Evaluation], unless the Architect instructs or approves otherwise in accordance with this Clause.

13.5 Payment in Applicable Currencies

If the Contract provides for payment of the Contract Price in more than one currency, then whenever an adjustment is agreed, approved or determined as stated above, the amount payable in each of the applicable currencies shall be specified. For this purpose, reference shall be made to the actual or expected currency proportions of the Cost of the varied work, and to the proportions of various currencies specified for payment of the Contract Price.

13.6 Provisional Sums

13.6.1 Each Provisional Sum shall only be used, in whole or inpart, in accordance with the Architect instructions, and the Contract Price shall be adjusted accordingly. The total sum paid to the Contractor shall include only such amounts, for the work, supplies or services to which the Provisional Sum relates, as the Architect shall have instructed. For each Provisional Sum, the Architect May instruct:

a) Work to be executed (including Plant, Materials or services to be supplied) by the Contractor and valued under Sub-Clause 13.3 [Variation Procedure]; and/or

b) Plant, Materials or services to be purchased by the Contractor, from a nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]) or otherwise; and for which there shall be included in the Contract Price:

i) The actual amounts paid (or due to be paid) by the Contractor, and

ii) a sum for overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate (if any) stated in the appropriate Schedule. If there is no such rate, the percentage rate stated in the Special Conditions of Contract shall be applied.

13.6.2 The Contractor shall, when required by the Engineer, produce quotations, invoices, vouchers and accounts or receipts in substantiation.

13.7 Dayworks

13.7.1 For work of a minor or incidental nature, the Architect may instruct that a Variation shall be executed on a daywork basis. The work shall then be valued in accordance with the Daywork Schedule included in the Contract, and the following procedure shall apply. If a Daywork Schedule is not included in the Contract, this Sub-Clause shall not apply.

13.7.2 Before ordering Goods for the work, the Contractor shall submit quotations to the Engineer. When applying for payment, the Contractor shall submit invoices, vouchers and accounts or receipts for any Goods.

13.7.3 Except for any items for which the Daywork Schedule specifies that payment is not due, the Contractor shall deliver each day to the Architect accurate statements induplicate which shall include the following details of the resources used in executing the previous day's work:

a) The names, occupations and time of Contractor's Personnel,

b) the identification, type and time of Contractor's Equipment and Temporary Works, and

c) the quantities and types of Plant and Materials used.

13.7.4 One copy of each statement will, if correct, or when agreed, be signed by the Architect and returned to the Contractor. The Contractor shall then submit priced statements of these resources to the Engineer, prior to their inclusion in the next Statement under Sub-Clause 14.3 [Application for Interim Payment Certificates].

13.8 Adjustments for Changes in Legislation

13.8.1 The Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of Kenya (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the Base Date, which affect the Contractor in the performance of obligations under the Contract.

13.8.2 If the Contractor suffers (or will suffer) delay and/or incurs (or will incur) additional Cost as a result of these changes in the Laws or in such interpretations, made after the Base Date, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

b) payment of any such Cost, which shall be included in the Contract Price.

13.8.3 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

13.8.4 Notwithstanding the foregoing, the Contractor shall not be entitled to an extension of time if the relevant delay has already been taken into account in the determination of a previous extension of time and such Cost shall not be separately paid if the same shall already have been taken into account in the indexing of any inputs to the table of adjustment data in accordance with the provisions of Sub-Clause 13.8 [Adjustments for Changes in Cost].

13.9 Adjustments for Changes in Cost

13.9.1 In this Sub-Clause, “table of adjustment data” means the completed table of adjustment data for local and foreign currencies included in the Schedules. If there is no such table of adjustment data, this Sub-Clause shall not apply.

13.9.2 If this Sub-Clause applies, the amounts payable to the Contractor shall be adjusted for rises or falls in the cost of labor, Goods and other inputs to the Works, by the addition or deduction of the amounts determined by the formulae prescribed in this Sub-Clause. To the extent that full compensation for any rise or fall in Costs is not covered by the provisions of this or other Clauses, the Accepted Contract Amount shall be deemed to have included a mounts to cover the contingency of other rises and falls in costs.

13.9.3 The adjustment to be applied to the amount otherwise payable to the Contractor, as valued in accordance with the appropriate Schedule and certified in Payment Certificates, shall be determined from formulae for each of the currencies in which the Contract Price is payable. No adjustment is to be applied to work valued on the basis of Cost or current prices. The formulae shall be of the following general type:

13.9.4 The cost indices or reference prices stated in the table of adjustment data shall be used. If their source is in doubt, it shall be determined by the Engineer. Forth is purpose, reference shall be made to the values of the indices at stated dates (quoted in the fourth and fifth columns respectively of the table) for the purposes of clarification of the source; although these dates (and thus these values) may not correspond to the base cost indices.

13.9.5 Incases where the "currency of index" is not the relevant currency of payment, each index shall be converted into the relevant currency of payment at the selling rate, established by the Central Bank of Kenya, of this relevant currency on the above date for which the index is required to be applicable.

13.9.6 Until such time as each current cost index is available, the Architect shall determine a provisional index for the issue of Interim Payment Certificates. When a current cost index is available, the adjustment shall be recalculated accordingly.

13.9.7 If the Contractor fails to complete the Works within the Time for Completion, adjustment of prices there after shall be made using either (i) each index or price applicableo n the date 49 days prior to the expiry of the Time for Completion of the Works, or (ii) the current index or price, whichever is more favorable to the Procuring Entity.

13.9.8 The weightings (coefficients) for each of the factors of cost stated in the table(s) of adjustment data shall only be adjusted if they have been rendered unreasonable, unbalanced or in applicable, as a result of Variations.

14. CONTRACT PRICE AND PAYMENT

14.1 The Contract Price

14.1.1 Unless otherwise stated in the Special Conditions:

a) The value of the payment certificate shall be agreed or determined under Sub-Clause 12.3 [Evaluation] and be subject to adjustments in accordance with the Contract;

b) the Contractor shall pay all taxes, duties and fees required to be paid by him under the Contract, and the Contract Price shall not be adjusted for any of these costs except as stated in Sub-Clause 13.7 [Adjustments for Changes in Legislation];

c) any quantities which may be set out in the Bill of Quantities or other Schedule are estimated quantities and are not to be taken as the actual and correct quantities:

i) of the Works which the Contractor is required to execute, or

ii) for the purposes of Clause12 [Measurement and Evaluation]; and

d) the Contractor shall submit to the Engineer, within 30 days after the Commencement Date, a proposed breakdown of each lump sum price in the Schedules. The Architect may take account of the break down when preparing Payment Certificates but shall not be bound by it.

14.1.2 Notwithstanding the provisions of subparagraph (b), Contractor's Equipment, including essential spare parts there for, imported by the Contractor for the sole purpose of executing the Contract shall not be exempt from the payment of import duties and taxes upon importation.

14.2 Advance Payment

14.2.1 The Procuring Entity shall make an advance payment, as an interest-free loan for mobilization and cashflow support, when the Contractor submits a guarantee in accordance with this Clause. The total advance payment, the number and timing of instalments (if more than one), and the applicable currencies and proportions, shall be as stated in the Special Conditions of Contract.

14.2.2 Unless and until the Procuring Entity receives this guarantee, or if the total advance payment is not stated in the Special Conditions of Contract, this Sub-Clause shall not apply.

14.2.3 The Architect shall deliver to the Procuring Entity and to the Contractor an Interim Payment Certificate for the advance payment or its first instalment after receiving a Statement (under Sub-Clause 14.3 [Application for Interim Payment Certificates]) and after the Procuring Entity receives (i) the Performance Security in accordance with Sub-Clause 4.2 [Performance Security] and (ii) a guarantee in amounts and currencies equal to the advance payment. This guarantee shall be issued by a reputable bank or financial institutions elected by the Contractor and shall be in the form annexed to the Special Conditions or in another form approved by the Procuring Entity.

14.2.4 The Contractor shall ensure that the guarantee is valid and enforceable until the advance payment has been repaid, but its amount shall be progressively reduced by the amount repaid by the Contractor as indicated in the Payment Certificates. If the terms of the guarantee specify its expiry date, and the advance payment has not been repaid by the date 30 days prior to the expiry date, the Contractor shall extend the validity of the guarantee until the advance payment has been repaid.

14.2.5 Unless stated otherwise in the Special Conditions of Contract, the advance payment shall be repaid through percentage deductions from the interim payments determined by the Architect in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates], as follows:

a) Deductions shall commence in the next interim Payment Certificate following that in which the total of all certified interim payments (excluding the advance payment and deductions and repayments of retention) exceeds 30 percent (30%) of the Accepted Contract Amount less Provisional Sums; and

b) deductions shall be made at the amortization rate stated in the Special Conditions of Contract of the amount of each Interim Payment Certificate (excluding the advance payment and deductions for its repayments as well as deductions for retention money) in the currencies and proportions of the advance payment until such time as the advance payment has been repaid; provided that the advance payment shall be completely repaid prior to the time when 90 percent (90%) of the Accepted Contract Amount less Provisional Sums has been certified for payment.

14.2.6 If the advance payment has not been repaid prior to the issue of the Taking-Over Certificate for the Works or prior to termination under Clause 15 [Termination by Procuring Entity], Clause 16 [Suspension and Termination by Contractor] or Clause 19 [Force Majeure] (as thec ase may be), the whole of the balance then outstanding shall immediately become due and in case of termination under Clause 15 [Termination by Procuring Entity], except for Sub-Clause 14.2.7 [Procuring Entity's Entitlement to Termination for Convenience], payable by the Contractor to the Procuring Entity.

14.3 Application for Interim Payment Certificates

14.3.1 The Contractor shall submit a Statement (in number of copies indicated in the Special Conditions of Contract) to the Architect after the end of each month, in a form approved by the Engineer, showing in detail the amounts to which the Contractor considers itself to be entitled, together with supporting documents which shall include there port on the progress during this month in accordance with Sub-Clause4.21 [Progress Reports].

14.3.2 The Statement shall include the following items, as applicable, which shall be expressed in the various currencies in which the Contract Price is payable, in the sequence listed:

a) the estimated contract value of the Works executed and the Contractor's Documents produced up to the end of the month (including Variations but excluding items described in sub-paragraphs (b) to (g) below);

b) any amounts to be added and deducted for changes in legislation and changes in cost, in accordance with Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost];

c) any amount to be deducted for retention, calculated by applying the percentage of retention stated in the Special Conditions of Contract to the total of the above amounts, until the amount so retained by the Procuring Entity reaches the limit of Retention Money (if any) stated in the Special Conditions of Contract;

d) any amounts to be added for the advance payment and (if more than one instalment) and to be deducted for its repayments in accordance with Sub-Clause 14.2 [Advance Payment];

e) any amounts to be added and deducted for Plant and Materials in accordance with Sub-Clause 14.5 [Plant and Materials intended for the Works];

f) any other additions or deductions which may have become due under the Contractor otherwise, including those under Clause 20 [Claims, Disputes and Arbitration]; and

g) the deduction of amounts certified in all previous Payment Certificates.

14.4 Schedule of Payments

14.4.1 If the Contract includes a schedule of payments specifying the instalments in which the Contract Price will be paid, then unless otherwise stated in this schedule:

a) The instalments quoted in this schedule of payments shall be the estimated contract values for the purposes of sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates];

b) Sub-Clause 14.5 [Plant and Materials intended for the Works] shall not apply; and

c) If these instalments are not defined by reference to the actual progress achieved in executing the Works, and if actual progress is found to be less or more than that on which this schedule of payments was based, then the Architect may proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine revised instalments, which shall take account of the extent to which progress is less or more than that on which the instalments were previously based.

14.4.2 If the Contract does not include a schedule of payments, the Contractor shall submit non-binding estimates of the payments which he expects to become due during each quarterly period. The first estimate shall be submitted within 42 days after the Commencement Date. Revised estimates shall be submitted at quarterly intervals, until the Taking-Over Certificate has been issued for the Works.

14.5 Plant and Materials intended for the Works

14.5.1 If this Sub-Clause applies, Interim Payment Certificates shall include, under sub-paragraph (e) of Sub-Clause 14.3, (i) an amount for Plant and Materials which have been sent to the Site for incorporation in the Permanent Works, and (ii) a reduction when the contract value of such Plant and Materials is included as part of the Permanent Works under sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates].

14.5.2 If the lists referred to in sub-paragraphs (b)(i) or (c)(i) below are not included in the Schedules, this Sub-Clause shall not apply.

14.5.3 The Architect shall determine and certify each addition if the following conditions a resatisfied:

a) The Contractor has:

i) kept satisfactory records (including the orders, receipts, Costs and use of Plant and Materials) which are available for inspection, and

(ii) submitted statement of the Cost of acquiring and delivering the Plant and Materials to the Site, supported by satisfactory evidence; and either:

b) the relevant Plant and Materials:

i) are those listed in the Schedules for payment when shipped,

ii) have been shipped to Kenya, enroute to the Site, in accordance with the Contract; and

iii) are described in a clean shipped bill of lading or other evidence of shipment, which has been submitted to the Architect together with evidence of payment of freight and insurance, any other documents reasonably required, and a bank guarantee in a form and issued by an entity approved by the Procuring Entity in amounts and currencies equal to the amount due under this Sub-Clause: this guarantee may be in a similar form to the form referred to in Sub-Clause14.2 [Advance Payment] and shall be valid until the Plant and Materials are properly stored on Site and protected against loss, damage or deterioration; or

c) the relevant Plant and Materials:

i) are those listed in the Schedules for payment when delivered to the Site, and

ii) have been delivered to and are properly stored on the Site, are protected against loss, damage or deterioration and appear to be in accordance with the Contract.

14.5.4 The additional amount to be certified shall be the equivalent of eighty percent (80%) of the Architect determination of the cost of the Plant and Materials (including delivery to Site), taking account of the documents mentioned in this Sub-Clause and of the contract value of the Plant and Materials.

14.5.5 The currencies for this additional amount shall be the same as those in which payment will become due when the contract value is included under sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates]. At that time, the Payment Certificate shall include the applicable reduction which shall be equivalent to, and in the same currencies and proportions as, this additional amount for the relevant Plant and Materials.

14.6 Issue of Interim Payment Certificates

14.6.1 No amount will be certified or paid until the Procuring Entity has received and approved the Performance Security. Thereafter, the Architect shall, within 30 days after receiving a Statement and supporting documents, deliver to the Procuring Entity and to the Contractor an Interim Payment Certificate which shall state the amount which the Architect fairly determines to be due, with all supporting particulars for any reduction or withholding made by the Architect on the Statemen tif any.

14.6.2 However, prior to issuing the Taking-Over Certificate for the Works, the Architect shall not be bound to issue an Interim Payment Certificate in an amount which would (after retention and other deductions) be less than the minimum amount of Interim Payment Certificates (if any) stated in the Special Conditions of Contract. In this event, the Architect shall give notice to the Contractor accordingly.

14.6.3 An Interim Payment Certificate shall not be withheld for any other reason, although:

a) if anything supplied or work done by the Contractor is not in accordance with the Contract, the cost of rectification or replacement may be withheld until rectification or replacement has been completed; and/or

b) if the Contractor was or is failing to perform any work or obligation in accordance with the Contract, and had been so notified by the Engineer, the value of this work or obligation may be withheld until the work or obligation has been performed.

14.6.4 The Architect may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate. A Payment Certificate shall not be deemed to indicate the Architect acceptance, approval, consent or satisfaction.

14.7 Payment

14.7.1 The Procuring Entity shall pay to the Contractor:

a) The advance payment shall be paid within 60 days after signing of the contract by both parties or within 60 days after receiving the documents in accordance with Sub-Clause 4.2 [Performance Security] and Sub- Clause 14.2 [Advance Payment], which ever is later;

b) The amount certified in each Interim Payment Certificate within 60 days after the Architect Issues Interim Payment Certificate; and

c) the amount certified in the Final Payment Certificate within 60 days after the Procuring Entity Issues Interim Payment Certificate; or after determination of any disputed amount shown in the Final Statement in accordance with Sub-Clause 16.2 [Termination by Contractor].

14.7.2 Payment of the amount due in each currency shall be made into the bank account, nominated by the Contractor, in the payment country (forth is currency) specified in the Contract.

14.8 Delayed Payment

14.8.1 If the Contractor does not receive payment in accordance with Sub-Clause 14.7 [Payment], the Contractor shall be entitled to receive financing charges (simple interest) monthly on the amount unpaid during the period of delay. This period shall be deemed to commence on the date for payment specified in Sub-Clause 14.7 [Payment], irrespective (in the case of its sub-paragraph (b) of the date on which any Interim Payment Certificate is issued.

14.8.2 These financing charges shall be calculated at the annual rate of three percentage points above the mean rate of the Central Bank in Kenya of the currency of payment, or if not available, the interbank offered rate, and shall be paid in such currency.

14.8.3 The Contractor shall be entitled to this payment without formal notice and certification, and without prejudice to any other right or remedy.

14.9 Payment of Retention Money

14.9.1 When the Taking-Over Certificate has been issued for the Works, the first half of the Retention Money shall be certified by the Architect for payment to the Contractor. If a Taking-Over Certificate is issued for a Section or part of the Works, a proportion of the Retention Money shall be certified and paid. This proportion shall behalf (50%) of the proportion calculated by dividing the estimated contract value of the Section or part, by the estimated final Contract Price.

14.9.2 Promptly after the latest of the expiry dates of the Defects Liability Periods, the outstanding balance of the Retention Money shall be certified by the Architect for payment to the Contractor. If a Taking-Over Certificate was issued for a Section, a proportion of the second half of the Retention Money shall be certified and paid promptly after the expiry date of the Defects Notification Period for the Section. This proportion shall behalf (50%) of the proportion calculated by dividing the estimated contract value of the Section by the estimated final Contract Price.

14.9.3 However, if any work remains to be executed under Clause 11 [Defects Liability], the Architects hall be entitled to withhold certification of the estimated cost of this work until it has been executed.

14.9.4 When calculating these proportions, no account shall be taken of any adjustments under Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause13.8 [Adjustments for Changes in Cost].

14.9.5 Unless otherwise stated in the Special Conditions, when the Taking-Over Certificate has been issued for the Works and the first half of the Retention Money has been certified for payment by the Engineer, the Contractor shall be entitled to substitute a Retention Money Security guarantee, in the form annexed to the Special Conditions or in another form approved by the Procuring Entity and issued by a reputable bank or financial institution selected by the Contractor, for the second half of the Retention Money.

14.9.6 The Procuring Entity shall return the Retention Money Security guarantee to the Contractor within 14 days after receiving a copy of the Completion Certificate.

14.10 Statement at Completion

14.10.1 Within 84 days after receiving the Taking-Over Certificate for the Works, the Contractor shall submit to the Architect three copies of a Statement at completion with supporting documents, in accordance with Sub- Clause 14.3 [Application for Interim Payment Certificates], showing:

a) the value of all work done in accordance with the Contract up to the date stated in the Taking-Over Certificate for the Works,

b) any further sums which the Contractor considers to be due, and

c) an estimate of any other amounts which the Contractor considers will become due to him under the Contract. Estimated amounts shall be shown separately in this Statement at completion.

14.10.2 The Architect shall then certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates].

14.11 Application for Final Payment Certificate

14.11.1 Within 60 days after receiving the Completion Certificate, the Contractor shall submit, to the Engineer, six copies of a draft final statement with supporting documents showing in detail in a form approved by the Engineer:

a) The value of all work done in accordance with the Contract, and

b) Any further sums which the Contractor considers to be due to him under the Contractor otherwise.

14.11.2 If the Architect disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Architect may reasonably require within 30 days from receipt of said draft and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Architect the final statement as agreed. This agreed statement is referred to in these Conditions as the "Final Statement".

14.11.3 However, if, following discussions between the Architect and the Contractor and any changes to the draft final statement which are agreed, it be comes evident that a dispute exists, the Architect shall deliver to the Procuring Entity (with a copy to the Contractor) an Interim Payment Certificate for the agreed parts of the draft final statement. Thereafter, if the dispute is finally resolved under Sub-Clause 20.4 [Obtaining Dispute Board's Decision] or Sub-Clause 20.5 [Amicable Settlement], the Contractor shall then prepare and submit to the Procuring Entity (with a copy to the Engineer) a Final Statement.

14.12 Discharge

When submitting the Final Statement, the Contractor shall submit a discharge which confirms that the total of the Final Statement represents full and final settlement of all moneys due to the Contractor under or in connection with the Contract. This discharge may state that it becomes effective when the Contractor has received the Performance Security and the out standing balance of this total, in which event the discharge shall be effective on such date.

14.13 Issue of Final Payment Certificate

14.13.1 Within 30days after receiving the Final Statement and discharge in accordance with Sub-Clause 14.11 [Application for Final Payment Certificate] and Sub-Clause 14.12 [Discharge], the Architect shall deliver, to the Procuring Entity and to the Contractor, the Final Payment Certificate which shall state:

a) The amount which he fairly determines is finally due, and

b) After giving credit to the Procuring Entity for all amounts previously paid by the Procuring Entity and for all sums to which the Procuring Entity is entitled, the balance (if any) due from the Procuring Entity to the Contractor or from the Contractor to the Procuring Entity, as the case may be.

14.13.2 If the Contractor has not applied for a Final Payment Certificate in accordance with Sub-Clause 14.11 [Application for Final Payment Certificate] and Sub-Clause 14.12 [Discharge], the Architect shall request the Contractor to do so. If the Contractor fails to submit an application within a period of 30 days, the Architect shall issue the Final Payment Certificate for such amount as he fairly determines to be due.

14.14 Cessation of Procuring Entity's Liability

14.14.1 The Procuring Entity shall not be liable to the Contractor for any matter or thing under or in connection with the Contract or execution of the Works, except to the extent that the Contractor shall have included an amount expressly for it:

a) in the Final Statement and also,

b) (except for matters or things arising after the issue of the Taking-Over Certificate for the Works) in the Statement at completion described in Sub-Clause 14.10 [Statement at Completion].

14.14.2 However, this Sub-Clause shall not limit the Procuring Entity's liability under his in demnification obligations, or the Procuring Entity's liability in any case of fraud, deliberate default or reckless misconduct by the Procuring Entity.

14.15 Currencies of Payment

The Contract Price shall be paid in the currency or currencies named in the Schedule of Payment Currencies. If more than one currency is so named, payments shall be made as follows:

a) If the Accepted Contract Amount was expressed in Local Currency only:

i) the proportions or amounts of the Local and Foreign Currencies, and the fixed rates of exchange to be used for calculating the payments, shall be as stated in the Schedule of Payment Currencies, except as otherwise agreed by both Parties;

ii) payments and deductions under Sub-Clause 13.5 [Provisional Sums] and Sub-Clause 13.7 [Adjustments for Changes in Legislation] shall be made in the applicable currencies and proportions; and

iii) other payments and deductions under sub-paragraphs (a) to (d) of Sub-Clause 14.3 [Application for Interim Payment Certificates] shall be made in the currencies and proportions specified in sub-paragraph (a) (i) above;

b) payment of the damages specified in the Special Conditions of Contract, shall be made in the currencies and proportions specified in the Schedule of Payment Currencies;

c) other payments to the Procuring Entity by the Contractor shall be made in the currency in which the sum was expended by the Procuring Entity, or in such currency as may be agreed by both Parties;

d) if any amount payable by the Contractor to the Procuring Entity in a particular currency exceeds the sum payable by the Procuring Entity to the Contractor in that currency, the Procuring Entity may recover the balance of this amount from the sums otherwise payable to the Contractor in other currencies; and

e) if no rates of exchange are stated in the Schedule of Payment Currencies, they shall be those prevailing on the Base Date and determined by the Central Bank of Kenya.

15. TERMINATION BY PROCURING ENTITY

15.1 Notice to correct any defects or failures

If the Contractor fails to carry out any obligation under the Contract, the Architect may by notice require the Contractor to make good the failure and to remedy it within 30 days.

15.2 Termination by Procuring Entity

15.2.1 The Procuring Entity shall be entitled to terminate the Contract if the Contractor breaches the contract based on following circumstances which shall include but not limited to:

a) fails to comply with Sub-Clause 4.2 [Performance Security] or with a notice under Sub-Clause 15.1 [Notice to Correct],

b) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract,

c) without reasonable excuse fails:

i) to proceed with the Works in accordance with Clause 8 [Commencement, Delays and Suspension], or

ii) to comply with a notice issued under Sub-Clause 7.5 [Rejection] or Sub-Clause 7.6 [Remedial Work], within 30 days after receiving it,

d) subcontracts the major part or whole of the Works or assigns the Contract without the consent of the Procuring Entity,

e) becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events, or

f) gives or offers to give (directly or indirectly) to any person any bribe, gift, gratuity, commission or other thing of value, as an induce mentor reward:

i) for doing or for bearing to do any action in relation to the Contract, or

ii) for showing or for bearing to show favor or disfavor to any person in relation to the Contract, or

iii) if any of the Contractor's Personnel, agents or Subcontractors gives or offers to give (directly or indirectly) to any person any such induce mentor reward as is described in this sub-paragraph (f). However, lawful inducements and rewards to Contractor's Personnel shall not entitle termination, or

g) If the contract or repeatedly fails to remedy delivers defective work,

h) based on reasonable evidence, has engaged in Fraud and Corruption as defined in paragraph 2.2 of the Appendix B to these General Conditions, incompeting for or in executing the Contract.

15.2.2 In any of these events or circumstances, the Procuring Entity may, upon giving 14 days' notice to the Contractor, terminate the Contract and expel the Contractor from the Site. However, in the case of sub- paragraph (e) or (f) or (g) or (h), the Procuring Entity may by notice terminate the Contract immediately.

15.2.3 The Procuring Entity's election to terminate the Contract shall not prejudice any other rights of the Procuring Entity, under the Contractor otherwise.

15.2.4 The Contractor shall then leave the Site and deliver any required Goods, all Contractor's Documents, and other design documents made by or for him, to the Engineer. However, the Contractor shall use his best efforts to comply immediately with any reasonable instructions included in the notice (i) for the assignment of any subcontract, and (ii) for the protection of life or property or for the safety of the Works.

15.2.5 After termination, the Procuring Entity may complete the Works and/ or arrange for any other entities to do so. The Procuring Entity and these entities may then use any Goods, Contractor's Documents and other design documents made by or on behalf of the Contractor.

15.2.6 The Procuring Entity shall then give notice that the Contractor's Equipment and Temporary Works will be released to the Contractor at or near the Site. The Contractor shall promptly arrange their removal, at the risk and cost of the Contractor. However, if by this time the Contractor has failed to make a payment due to the Procuring Entity, these items may be sold by the Procuring Entity in order to recover this payment. Any balance of the proceeds shall then be paid to the Contractor.

15.3 Valuation at Date of Termination

As soon as practicable after a notice of termination under Sub-Clause 15.2 [Termination by Procuring Entity] has taken effect, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the value of the Works, Goods and Contractor's Documents, and any other sums due to the Contractor for work executed in accordance with the Contract.

15.4 Payment after Termination

After a notice of termination under Sub-Clause 15.2 [Termination by Procuring Entity] has taken effect, the Procuring Entity may:

a) Proceed in accordance with Sub-Clause 2.5 [Procurin Entity's Claims],

b) withhold further payments to the Contractor until the costs of execution, completion and remedying of any defects, damages for delay in completion (if any), and all other costs incurred by the Procuring Entity, have been established, and/ or

c) recover from the Contractor any losses and damages incurred by the Procuring Entity and any extra costs of completing the Works, after allowing for any sum due to the Contractor under Sub-Clause 15.3 [Valuation at Date of Termination]. After recovering any such losses, damages and extra costs, the Procuring Entity shall pay any balance to the Contractor.

15.5 Procuring Entity's Entitlement to Termination for Convenience

The Procuring Entity shall be entitled to terminate the Contract, at any time at the Procuring Entity's convenience, by giving notice of such termination to the Contractor. The termination shall take effect 30 days after the later of the dates on which the Contractor receives this notice or the Procuring Entity returns the Performance Security. The Procuring Entity shall not terminate the Contract under this Sub-Clause in order to execute the Works itself or to arrange for the Works to be executed by another contractor or to avoid a termination of the Contract by the Contractor under Clause 16.2 [Termination by Contractor]. After this termination, the Contractor shall proceed in accordance with Sub-Clause 16.3 [Cessation of Work and Removal of Contractor's Equipment] and shall be paid in accordance with Sub-Clause 16.4 [Payment on Termination].

15.6 Fraud and Corruption

The Contractor shall ensure compliance with the Kenya Government's Anti-Corruption Laws and its prevailing sanctions.

15.7 Corrupt gifts and payments of commission

15.7.1 The Contractor shall not;

a) Offer or give or agree to give to any person in the service of the Procuring Entity any gift or consideration of any kind as an inducement or reward for doing or for bearing to door for having done or for borne to do any act in relation to the obtaining or execution of this or any other Contract for the Procuring Entity or for showing or for bearing to show favor or disfavor to any person in relation to this or any other contract for the Procuring Entity.

b) Enter into this or any other contract with the Procuring Entity in connection with which commission has been paid or agreed to be paid by him or on his behalf or to his knowledge, unless before the Contract is made particulars of any such commission and of the terms and conditions of any agreement for the payment there of have been disclosed in writing to the Procuring Entity.

15.7.2 Any breach of this Condition by the Contractor or by anyone employed by him or acting on his behalf (whether with or without the knowledge of the Contractor) shall be an offence under the provisions of the Public Procurement and Asset Disposal Act (2015) and the Anti-Corruption and Economic Crimes Act (2003) of the Laws of Kenya.

16. SUSPENSION AND TERMINATION BY CONTRACTOR

16.1 Contractor's Entitlement to Suspend Work

16.1.1 If the Architect fails to certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates] or Sub-Clause 14.7 [Payment],or not receiving instructions that would enable the contractor to proceed with the works in accordance with the program, the Contractor may, after giving not less than 30 days' notice to the Procuring Entity, suspend work (or reduce the rate of work) unless and until the Contractor has received the Payment Certificate, reasonable evidence or payment, as the case may be and as described in the notice.

16.1.2 The Contractor's action shall not prejudice his entitlements to financing charges under Sub-Clause 14.8 [Delayed Payment] and to termination under Sub-Clause 16.2 [Terminationby Contractor].

16.1.3 If the Contractor subsequently receives such Payment Certificate, evidence or payment (as described in the relevant Sub-Clause and in the above notice) before giving a notice of termination, the Contractor shall resume normal working as soon as is reasonably practicable.

16.1.4 If the Contractor suffers delay and/ori ncurs Cost as a result of suspending work (or reducing the rate of work) in accordance with this Sub-Clause, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

b) payment of any such Cost-plus profit, which shall be included in the Contract Price.

16.2 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

16.3 Termination by Contractor

16.3.1 The Contractor shall be entitled to terminate the Contract if:

a) the Architect fails, within 60 days after receiving a Statement and supporting documents, to issue the relevant Payment Certificate,

b) the Contractor does not receive the amount due under an Interim Payment Certificate within 90 days after the expiry of the time stated in Sub-Clause1 4.7 [Payment] within which payment is to be made (except for deductions in accordance with Sub-Clause 2.5 [Procuring Entity's Claims]),

c) the Procuring Entity substantially fails to perform his obligations under the Contract in such manner as to materially and adversely affect the economic balance of the Contract and/or the ability of the Contractor to perform the Contract,

d) a prolonged suspension affects the whole of the Works as described in Sub-Clause 8.11 [Prolonged Suspension], or

e) the Procuring Entity becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events.

f) the Contractor does not receive the Architect instruction recording the agreement of both Parties on the fulfilment of the conditions for the Commencement of Works under Sub-Clause 8.1 [Commencement of Works].

16.3.2 In any of these events or circumstances, the Contractor may, upon giving 14 days' notice to the Procuring Entity, terminate the Contract. However, in the case of sub-paragraph (f) or (g), the Contractor may by notice terminate the Contract immediately.

16.3.3 The Contractor's election to terminate the Contract shall not prejudice any other rights of the Contractor, under the Contractor otherwise.

16.4 Cessation of Work and Removal of Contractor's Equipment

After a notice of termination under Sub-Clause 15.5 [Procuring Entity's Entitlement to Termination for Convenience], Sub-Clause 16.2 [Termination by Contractor] or Sub-Clause 19.6 [Optional Termination, Payment and Release] has taken effect, the Contractor shall promptly:

a) cease all further work, except for such work as may have been instructed by the Architect for the protection of life or property or for the safety of the Works,

b) hand over Contractor's Documents, Plant, Materials and other work, for which the Contractor has received payment, and

c) remove all other Goods from the Site, except as necessary for safety, and leave the Site.

16.5 Payment on Termination

After a notice of termination under Sub-Clause 16.2 [Termination by Contractor] has taken effect, the Procuring Entity shall promptly:

a) Return the Performance Security to the Contractor,

b) pay the Contractor in accordance with Sub-Clause 19.6 [Optional Termination, Payment and Release], and

c) pay to the Contractor the amount of any loss or damage sustained by the Contractor as a result of this termination.

17. RISK AND RESPONSIBILITY

17.1 Indemnities

17.1.1 The Contractor shall indemnify and hold harmless the Procuring Entity, the Procuring Entity's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of:

a) Bodily injury, sickness, disease or death, of any person what so ever arising outo for in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless attributable to any negligence, willful actor breach of the Contract by the Procuring Entity, the Procuring Entity's Personnel, or any of their respective agents, and

b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss arises out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless and to the extent that any such damage or loss is attributable to any negligence, willful act or breach of the Contract by the Procuring Entity, the Procuring Entity's Personnel, their respective agents, or anyone directly or indirectly employed by any of them.

17.1.2 The Procuring Entity shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of (1) bodily injury, sickness, disease or death, which is attributable to any negligence, willful act or breach of the Contract by the Procuring Entity, the Procuring Entity's Personnel, or any of their respective agents, and (2) the matters for which liability may be excluded from insurance cover, as described in sub-paragraphs (d)(i), (ii) and (iii) of Sub-Clause 18.3 [Insurance Against Injury to Persons and Damage to Property], unless and to the extent that any such damage or loss is attributable to any negligence, willful actor breach of the Contract by the contractor, the contractor's Personnel, their respective agents, or anyone directly or indirectly employed by any of them.

17.2 Contractor's Care of the Works

17.2.1 The Contractor shall take full responsibility for the care of the Works and Goods from the Commencement Date until the Taking-Over Certificate is issued (or is deemed to be issued under Sub-Clause 10.1 [Taking Over of the Works and Sections]) for the Works, when responsibility for the care of the Works shall pass to the Procuring Entity. If a Taking-Over Certificate is issued (or is so deemed to be issued) for any Section or part of the Works, responsibility for the care of the Section or part shall then pass to the Procuring Entity.

17.2.2 After responsibility has accordingly passed to the Procuring Entity, the Contractor shall take responsibility for the care of any work which is outstanding on the date stated in a Taking-Over Certificate, until this outstanding work has been completed.

17.2.3 If any loss or damage happens to the Works, Goods or Contractor's Documents during the period when the Contractor is responsible for their care, from any cause not listed in Sub-Clause 17.3 [Procuring Entity's Risks], the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the Works, Goods and Contractor's Documents conform with the Contract.

17.2.4 The Contractor shall be liable for any loss or damage caused by any actions performed by the Contractor after a Taking-Over Certificate has been issued. The Contractor shall also be liable for any loss or damage which occurs after a Taking-Over Certificate has been issued and which arose from a previous event for which the Contractor was liable.

17.3 Procuring Entity's Risks

The risks referred to in Sub-Clause 17.4 [Consequences of Procuring Entity's Risks] below, in so far as they directly affect the execution of the Works in Kenya, are:

a) War hostilities (whether war be declared or not),

b) rebellion, riot, commotion or disorder, terrorism, sabotage by persons other than the Contractor's Personnel,

c) explosive materials, ionizing gradiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such explosives, radiation or radio-activity,

d) pressure waves caused by aircraft or other aerial devices traveling at sonic or supersonic speeds,

e) use or occupation by the Procuring Entity of any part of the Permanent Works, except as may be specified in the Contract,

f) design of any part of the Works by the Procuring Entity's Personnel or by others for whom the Procuring Entity is responsible, and

g) any operation of the forces of nature which is Unforeseeable or against which an experienced contractor could not reasonably have been expected to have taken adequate preventive precautions.

17.4 Consequences of Procuring Entity's Risks

17.4.1 If and to the extent that any of the risks listed in Sub-Clause 17.3 above results in loss or damage to the Works, Goods or Contractor's Documents, the Contractor shall promptly give notice to the Architect and shall rectify this loss or damage to the extent required by the Engineer.

17.4.2 If the Contractor suffers delay and/ or incurs Cost from rectifying this loss or damage, the Contractor shall give a further notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

(a) An extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

(b) payment of any such Cost, which shall be included in the Contract Price. In the case of sub-paragraphs (e)and (g) of Sub-Clause 17.3 [Procuring Entity's Risks], Accrued Costs shall be payable.

17.4.3 After receiving this further notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

17.5 Intellectual and Industrial Property Rights

17.5.1 In this Sub-Clause, "infringement" shall refer to an infringement (or alleged infringement) of any patent, registered design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works; and "claim" shall refer to a claim (or proceedings pursuing a claim) alleging an infringement.

17.5.2 Whenever a Party does not give notice to the other Party of any claim within 30 days of receiving the claim, the first Party shall be deemed to have waived any right to indemnity under this Sub-Clause.

17.5.3 The Procuring Entity shall indemnify and hold the Contractor harmless against and from any claim alleging an infringement which is or was:

a) An un avoidable result of the Contractor's compliance with the Contract, or

b) A result of any Works be ingused by the Procuring Entity:

i) for a purpose other than that indicated by, or reasonably to be inferred from, the Contract, or

ii) in conjunction with anything not supplied by the Contractor, unless such use was disclosed to the Contractor prior to the Base Date or is stated in the Contract.

17.5.4 The Contractor shall indemnify and hold the Procuring Entity harmless again stand from any other claim which arises out of or in relation to (i) the manufacture, use, sale or import of any Goods, or (ii) any design for which the Contractor is responsible.

17.5.5 If a Party is entitled to be indemnified under this Sub-Clause, the indemnifying Party may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it. The other Party shall, at the request and cost of the indemnifying Party, assist in contesting the claim. This other Party (and its Personnel) shall not make any admission which might be prejudicial to the indemnifying Party, unless the indemnifying Party failed to take over the conduct of any negotiations, litigation or arbitration upon being requested to do so by such other Party.

17.5.6 For operation and maintenance of any plan to requipment installed, the contractor shall grant a non-exclusive and non-transferable license to the Procuring Entity under the patent, utility models ,or other intellectual rights owned by the contractor or a third party from whom the contract or has received the rights to grant sub-licenses and shall also grant to the Procuring Entity a non-exclusive and non-transferable rights (without the rights to sub-license) to use the know how and other technical information disclosed to the contract or under the contract. Nothing contained here-in shall be construed as transferring ownership of any patent, utility model, trademark, design, copy right, know-how or other intellectual rights from the contractor or any other third party to the Procuring Entity.

17.6 Limitation of Liability

17.6.1 Neither Party shall be liable to the other Party for loss of use of anyW orks, loss of profit, loss of any contractor for any in director consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than as specifically provided in Sub-Clause 8.7 [Delay Damages]; Sub-Clause 11.2 [Cost of Remedying Defects]; Sub-Clause 15.4 [Payment after Termination]; Sub-Clause 16.4 [Payment on Termination]; Sub-Clause 17.1 [Indemnities]; Sub-Clause 17.4(b) [Consequences of Procuring Entity's Risks] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights].

17.6.2 The total liability of the Contractor to the Procuring Entity, under or in connection with the Contract other than under Sub-Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Procuring Entity's Equipment and Free- Issue Materials], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights], shall not exceed the sum resulting from the application of a multiplier (less or greater than one) to the Accepted Contract Amount, as stated in the Special Conditions of Contract, or (if such multiplier or other sum is not so stated) the Accepted Contract Amount.

17.6.3 This Sub-Clause shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.

17.7 Use of Procuring Entity's Accommodation/Facilities

17.7.1 The Contractor shall take full responsibility for the care of the Procuring Entity provided accommodation and facilities, if any, as detailed in the Specification, from the respective dates of

hand-over to the Contractor until cessation of occupation (where hand-over or cessation of occupation may take place after the date stated in the Taking-Over Certificate for the Works).

17.7.2 If any loss or damage happens to any of the above items while the Contractor is responsible for their care arising from any cause whatsoever other than those for which the Procuring Entity is liable, the Contractor shall, at his own cost, rectify the loss or damage to the satisfaction of the Engineer.

18. INSURANCE

18.1 General Requirements for Insurances

18.1.1 In this Clause, "insuring Party" means, for each type of insurance, the Party responsible for effecting and maintaining the insurance specified in the relevant Sub-Clause.

18.1.2 Wherever the Contractor is the insuring Party, each insurance shall be effected with insurers and in terms approved by the Procuring Entity. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.

18.1.3 Wherever the Procuring Entity is the insuring Party, each insurance shall be effected with insurers and in terms acceptable to the Contractor. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.

18.1.4 If a policy is required to indemnify joint insured, the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured. If a policy indemnifies additional joint insured, namely in addition to the insured specified in this Clause, (i) the Contractor shall act under the policy on behalf of these additional joint insured except that the Procuring Entity shall act for Procuring Entity's Personnel, (ii) additional joint insured shall not be entitled to receive payments directly from the insurer or to have any other direct dealings with the insurer, and (iii) the insuring Party shall require all additional joint insured to comply with the conditions stipulated in the policy.

18.1.5 Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify the loss or damage. Payments received from insurers shall be used for the rectification of the loss or damage.

18.1.6 The relevant insuring Party shall, within the respective periods stated in the Special Conditions of Contract (calculated from the Commencement Date), submit to the other Party:

a) Evidence that the insurances described in this Clause have been affected, and

b) copies of the policies for the insurances described in Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment] and Sub-Clause 18.3 [Insurance against Injury to Persons and Damage to Property].

18.1.7 When each premium is paid, the insuring Party shall submit evidence of payment to the other Party. Whenever evidence or policies are submitted, the insuring Party shall also give notice to the Engineer.

18.1.8 Each Party shall comply with the conditions stipulated in each of the insurance policies. The insuring Party shall keep the insurers informed of any relevant changes to the execution of the Works and ensure that insurance is maintained in accordance with this Clause.

18.1.9 Neither Party shall make any material alteration to the terms of any insurance without the prior approval of the other Party. If an insurer makes (or at tempts to make) any alteration, the Party first notified by the insurer shall promptly give notice to the other Party.

18.1.10 If the insuring Party fails to effect and keep in force any of the insurances it is required to effect and maintain under the Contractor fails to provide satisfactory evidence and copies of policies in accordance with this Sub- Clause, the other Party may (at its option and without prejudice to any other right or remedy) effect insurance for the relevant coverage and pay the premiums due. The insuring Party shall pay the amount of these premiums to the other Party, and the Contract Price shall be adjusted accordingly.

18.1.11 Nothing in this Clause limits the obligations, liabilities or responsibilities of the Contractor or the Procuring Entity, under the other terms of the Contractor otherwise. Any amounts not insured or not recovered from the insurers shall be borne by the Contractor and/or the Procuring Entity.

18.1.12 Procuring Entity in accordance with these obligations, liabilitieso r responsibilities. However, if the insuring Party fails to effect and keep in force an insurance which is available and which it is required to effect and maintain under the Contract, and the other Party neither approves the omission nor effects insurance for the coverage relevant to this default, any moneys which should have been recoverable under this insurance shall be paid by the insuring Party.

18.1.13 Payments by one Party to the other Party shall be subject to Sub-Clause 2.5 [Procuring Entity's Claims] or Sub- Clause 20.1 [Contractor's Claims], as applicable.

18.1.14 The Contractor shall be entitled to place all insurance relating to the Contract (including, but not limited to the insurance referred to Clause 18) with insurers from any eligible source country.

18.2 Insurance for Works and Contractor's Equipment

18.2.1 The insuring Party shall insure the Works, Plant, Material sand Contractor's Documents for not less than the full reinstatement cost including the costs of demolition, removal of debris and professional fees and profit. This insurance shall be effective from the date by which the evidence is to be submitted under sub-paragraph (a) of Sub-Clause 18.1 [General Requirements for Insurances], until the date of issue of the Taking-Over Certificate for the Works.

18.2.2 The insuring Party shall maintain this insurance to provide cover until the date of issue of the Performance Certificate, for loss or damage for which the Contractor is liable arising from a cause occurring prior to the issue of the Taking-Over Certificate, and for loss or damage caused by the Contractor in the course of any other operations (including those under Clause 11 [Defects Liability]).

18.2.3 The insuring Party shall insure the Contractor's Equipment for not less than the full replacement value, including delivery to Site. For each item of Contractor's Equipment, the insurance shall be effective while it is being transported to the Site and until it is no longer required as Contractor's Equipment.

18.2.4 Unless otherwise stated in the Special Conditions, insurances under this Sub-Clause:

a) Shall be effected and maintained by the Contractor as insuring Party,

b) shall be in the joint names of the Parties, who shall be jointly entitled to receive payments from the insurers, payments being held or allocated to the Party actually bearing the costs of rectifying the loss or damage,

c) shall cover all loss and damage from any cause not listed in Sub-Clause 17.3 [Procuring Entity's Risks],

d) shall also cover, to the extent specifically required in the tendering documents of the Contract, loss or damage to a part of the Works which is attributable to the use or occupation by the Procuring Entity of another part of the Works, and loss or damage from the risks listed in sub-paragraphs (c), (g) and (h)of Sub-Clause 17.3 [Procuring Entity's Risks], excluding (in each case) risks which are not insurable at commercially reasonable terms, with deductibles per occurrence of not more than the amount stated in the Special Conditions of Contract (if an amount is not so stated,t his sub-paragraph (d) shall not apply), and

e) may however exclude loss of, damage to, and reinstatement of:

i) a part of the Works which is in a defective condition due to a defect in its design, materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in sub-paragraph (ii) below),

ii) apart of the Works which is lost or damaged inorder to reinstate any other part of the Works if this other part is in a defective condition due to a defect in its design, materials or workmanship,

iii) apart of the Works which has been taken over by the Procuring Entity, except to the extent that the Contractor is liable for the loss or damage, and

iv) Goods while they are not in Kenya, subject to Sub-Clause 14.5 [Plant and Materials intended for the Works].

18.2.5 If, more than one year after the Base Date, the cover described in sub-paragraph (d) above ceases to be available at commercially reasonable terms, the Contractor shall (as insuring Party) give notice to the Procuring Entity, with supporting particulars. The Procuring Entity shall then (i) be entitled subject to Sub-Clause 2.5 [Procuring Entity's Claims] to payment of an amount equivalent to such commercially reasonable terms as the Contractor should have expected to have paid for such cover, and (ii) be deemed, unless he obtains the cover at commercially reasonable terms, to have approved the omission under Sub-Clause 18.1 [General Requirements for Insurances].

18.3 Insurance against Injury to Persons and Damage to Property

18.3.1 The insuring Party shall insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment]) or to any person (except persons insured under Sub-Clause 18.4 [Insurance for Contractor's Personnel]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate.

18.3.2 This insurance shall be for a limit per occurrence of not less than the amount stated in the Special Conditions of Contract, with no limit on the number of occurrences. If an amount is not stated in the Special Conditions of Contract, this Sub-Clause shall not apply.

18.3.3 Unless otherwise stated in the Special Conditions, the insurances specified in this Sub-Clause:

a) Shall be effected and maintained by the Contractor as insuring Party,

b) shall be in the joint names of the Parties,

c) shall be extended to cover liability for all loss and damage to the Procuring Entity's property (except things insured under Sub-Clause 18.2) arising out of the Contractor's performance of the Contract, and

d) may however exclude liability to the extent that it arises from:

i) the Procuring Entity's right to have the Permanent Works executed on, over, under, in or

ii) through any land, and to occupy this land for the Permanent Works,

iii) damage which is an unavoidable result of the Contractor's obligations to execute the

iv) Works and remedy any defects, and

v) a cause listed in Sub-Clause 17.3 [Procuring Entity's Risks], except to the extent that cover is available at commercially reasonable terms.

18.4 Insurance for Contractor's Personnel

18.4.1 The Contractor shall effect and maintain insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel.

18.4.2 The insurance shall cover the Procuring Entity and the Architect against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Procuring Entity or of the Procuring Entity's Personnel.

18.4.3 The insurance shall be maintained in full force and effect during the whole time that these personnel are assisting in the execution of the Works. For a Subcontractor's employees, the insurance may be effected by the Subcontractor, but the Contractor shall be responsible for compliance with this Clause.

19. FORCE MAJEURE

19.1 Definition of Force Majeure

19.1.1 In this Clause, "Force Majeure" means an exceptional event or circumstance:

a) Which is beyond a Party's control,

b) Which such Party could not reasonably have provided against before entering into the Contract,

c) which, having arisen, such Party could not reasonably have avoided or over come, and

d) which is not substantially attributable to the other Party.

19.1.2 Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:

a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,

b) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war,

c) riot, commotion, disorder, strike or lock out by persons other than the Contractor's Personnel,

d) munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and

e) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.

19.2 Notice of Force Majeure

19.2.1 If a Party is or will be prevented from performing its substantial obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, or should have become aware, of the relevant event or circumstance constituting Force Majeure.

19.2.2 The Party shall, having given notice, be excused performance of its obligations for so long as such Force Majeure prevents it from performing them.

19.2.3 Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either Party to make payments to the other Party under the Contract.

19.3 Duty to Minimize Delay

Each Party shall at all times use all reasonable endeavors to minimize any delay in the performance of the Contract as a result of Force Majeure. A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.

19.4 Consequences of Force Majeure

19.4.1 If the Contractor is prevented from performing his substantial obligations under the Contract by Force Majeure of which notice has been given under Sub-Clause 19.2 [Notice of Force Majeure], and suffers delay and/ or incurs Cost by reason of such Force Majeure, the Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

b) if the event or circumstance is of the kind described in sub-paragraphs (i) to (iv) of Sub-Clause 19.1 [Definition of Force Majeure] and, in sub-paragraphs (ii) to (iv), occurs in Kenya, payment of any such Cost, including the costs of rectifying or replacing the Works and/or Goods damaged or destroyed by Force Majeure, to the extent they are not indemnified through the insurance policy referred to in Sub- Clause18.2 [Insurance for Works and Contractor's Equipment].

19.4.2 After receiving this notice, the Architect shall proceed in a ccordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

19.5 Force Majeure Affecting Subcontractor

If any Subcontractor is entitled under any contract or agreement relating to the Works to relief from force majeure on terms additional to or broader than those specified in this Clause, such additional or broader force majeure events or circumstances shall not excuse the Contractor's non-performance or entitle him to relief under this Clause.

19.6 Optional Termination, Payment and Release

19.6.1 If the execution of substantially all the Works in progress is prevented for a continuous period of 84 days by reason of Force Majeure of which notice has been given under Sub-Clause 19.2 [Notice of Force Majeure], or for multiple periods which total more than 140 days due to the same notified Force Majeure, then either Party may give to the other Party a notice of termination of the Contract. In this event, the termination shall take effect 7 days after the notice is given, and the Contractor shall proceed in accordance with Sub-Clause 16.3 [Cessation of Work and Removal of Contractor's Equipment].

19.6.2 Upon such termination, the Architect shall determine the value of the work done and issue a Payment Certificate which shall include:

a) theamountspayableforanyworkcarriedoutforwhichapriceisstatedintheContract;

b) the Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery: this Plant and Materials shall become the property of (and be at the risk of) the Procuring Entity when paid for by the Procuring Entity, and the Contractor shall place the same at the Procuring Entity'sdisposal;

c) other Cost or liabilities which in the circumstances were reasonably and necessarily incurred by the Contractor in the expectation of completing the Works;

d) the Cost of removal of Temporary Works and Contractor's Equipment from the Site and the return of these items to the Contractor's works in his country (or to any other destination at no greater cost); and

e) the Cost of repatriation of the Contractor's staff and lab or employed wholly in connection with the Works at the date of termination.

19.7 Release from Performance

Notwithstanding any other provision of this Clause, if any event or circumstance outside the control of the Parties (including, but not limited to, Force Majeure) arises which makes it impossible or unlawful for either or both Parties to fulfil its or their contractual obligations or which, under the law governing the Contract, entitles the Parties to be released from further performance of the Contract, then upon notice by either Party to the other Party of such event or circumstance:

a) The Parties shall be discharged from further performance, without prejudice to the rights of either Party in respect of any previous breach of the Contract, and

b) The sum payable by the Procuring Entity to the Contractor shall be the same as would have been payable under Sub-Clause 19.6 [Optional Termination, Payment and Release] if the Contract had been terminated under Sub-Clause 19.6.

20. SETTLEMENT OF CLAIMS AND DISPUTES

20.1 Contractor's Claims

20.1.1 If the Contractor considers itself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give Notice to the Engineer, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 30 days after the Contractor became aware, or should have become aware, of the event or circumstance.

20.1.2 If the Contractor fails to give notice of a claim within such period of 30 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Procuring Entity shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply.

20.1.3 The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.

20.1.4 The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Engineer. Without admitting the Procuring Entity's liability, the Architect may, after receiving any notice under this Sub-Clause, monitor the record-keeping and/ or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Architect to inspect all these records and shall (if instructed) submit copies to the Engineer.

20.1.5 Within 42days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Engineer, the Contractor shall send to the Architect fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/ or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:

a) This fully detailed claim shall be considered as interim;

b) The Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/ or amount claimed, and such further particulars as the Architect may reasonably require; and

c) The Contractor shall send a final claim within 30 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Engineer.

20.1.6 Within 42 days after receiving a Notice of a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Architect and approved by the Contractor, the Architect shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars but shall nevertheless give his response on the principles of the claim within the above defined time period.

20.1.7 Within the above defined period of 42 days, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with Sub-Clause 8.4 [Extension of Time for Completion], and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.

20.1.8 Each Payment Certificate shall include such additional payment for any claim as has been reasonably substantiated as due under the relevant provision of the Contract.Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.

20.1.9 If the Architect does not respond within the time frame defined in this Clause, either Party may consider that the claim is rejected by the Architect and any of the Parties may refer the dispute for amicable settlement in accordance with Clause 20.3.

20.1.10 The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/ or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause 20.3.

20.2 Procuring Entity's Claims

20.2.1 If the Procuring Entity considers itself to be entitled to any payment under any Clause of these Conditions or otherwise in connection with the Contract, and/or to any extension of the Defects Notification Period, the Procuring Entity or the Architect shall give notice and particulars to the Contractor. However, notice is not required for payments due under Sub-Clause 4.19 [Electricity, Water and Gas], under Sub-Clause 4.20 [Procuring Entity's Equipment and Free-Issue Materials], or for other services requested by the Contractor.

20.2.2 The notice shall be given as soon as practicable and no longer than 30 days afte rthe Procuring Entity became aware, or should have become aware, of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Notification Period shall be given before the expiry of such period.

20.2.3 The particulars shall specify the Clause or other basis of the claim and shall include substantiation of the amount and/or extension to which the Procuring Entity considers itself to be entitled in connection with the Contract. The Architect shall then proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) the amount (if any) which the Procuring Entity is entitled to be paid by the Contractor, and/ or (ii) the extension (if any) of the Defects Notification Period in accordance with Sub-Clause 11.3 [Extension of Defects Notification Period].

20.2.4 This amount may be included as a deduction in the Contract Price and Payment Certificates. The Procuring Entity shall only be entitled to set off against or make any deduction from an amount certified in a Payment Certificate, or to otherwise claim against the Contractor, in accordance with this Sub-Clause.

20.3 Amicable Settlement

Where a notice of a claim has been given, both Parties shall attempt to settle the dispute amicably before the commencement of arbitration. However, unless both Parties agree otherwise, the Party

giving a notice of a claim in accordance with Sub-Clause 20.1 above should move to commence arbitration after 60 days from the day on which a notice of a claim was given, even if no attempt at an amicable settlement has been made.

20.4 Matters that may be referred to arbitration

Notwithstanding anything stated herein the following matters may be referred to arbitration before the practical completion of the Works or abandonment of the Works or termination of the Contract by either party:

a) Whether or not the issue of an instruction by the Architect is empowered by these Conditions.

b) Whether or not a certificate has been improperly withheld or is not in accordance with these Conditions.

c) Any dispute arising in respect risks arising from matters referred to in Clause 17.3 and Clause 19.

e) All other matters shall only be referred to arbitration after the completion or alleged completion of the Works or termination or alleged termination of the Contract, unless the Procuring Entity and the Contractor agree otherwise in writing.

20.5 Arbitration

20.5.1 Any claim or dispute between the Parties arising out of or in connection with the Contract not settled amicably in accordance with Sub-Clause 20.3 shall be finally settled by arbitration.

20.5.2 No arbitration proceedings shall be commenced on any claim or dispute where notice of a claim or dispute has not been given by the applying party within ninety days of the occurrence or discovery of the matter or issue giving rise to the dispute.

20.5.3 Notwithstanding the issue of a notice as stated above, the arbitration of such a claim or dispute shall not commence unless an attempt has in the first instance been made by the parties to settle such claim or dispute amicably with or without the assistance of third parties. Proof of such attempt shall be required.

20.5.4 The Arbitrator shall, without prejudice to the generality of his powers, have powers to direct such measurements, computations, tests or valuations as may in his opinion be desirable in order to determine the rights of the parties and assess and a ward any sums which ought to have been the subject of or included in any certificate.

20.5.5 The Arbitrator shall, without prejudice to the generality of his powers, have powers to open up, review and revise any certificate, opinion, decision, requirement or notice and to determine all matters in dispute which shall be submitted to him in the same manner as if no such certificate, opinion, decision require mentor notice had been given.

20.5.6 The arbitrators shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Engineer, relevant to the dispute. Nothing shall disqualify representatives of the Parties and the Architect from being called as a witness and giving evidence before the arbitrators on any matter whatsoever relevant to the dispute.

20.5.7 Neither Party shall be limited in the proceedings before the arbitrators to the evidence, or to the reasons for dissatisfaction given in its Notice of Dissatisfaction.

20.5.7 Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, and the Architect shall not be altered by reason of any arbitration being conducted during the progress of the Works.

20.5.8 The terms of the remuneration of each or all the members of Arbitration shall be mutually agreed upon by the Parties when agreeing the terms of appointment. Each Party shall be responsible for paying one-half of this remuneration.

20.6 Arbitration with National Contractors

20.6.1 If the Contract is with national contractors, arbitration proceedings will be conducted in accordance with the Arbitration Laws of Kenya. In case of any claim or dispute, such claim or dispute shall be notified in writing by either party to the other with a request to submit it to arbitration and to concur in the appointment of an Arbitrator within thirty days of the notice. The dispute shall be referred to the arbitration and final decision of a person to be agreed between the parties. Failing agreement to concur in the appointment of an Arbitrator, the Arbitrator shall be appointed, on the request of the applying party, by the Chairman or Vice Chairman of any of the following professional institutions;

i) Architectural Association of Kenya

ii) Institute of Quantity Surveyors of Kenya

iii) Association of Consulting Engineers of Kenya

iv) Chartered Institute of Arbitrators (Kenya Branch)

v) Institution of Engineers of Kenya

20.6.2 The institution written to first by the aggrieved party shall take precedence over all other institutions.

20.7 Arbitration with Foreign Contractors

20.7.1 Arbitration with foreign contractors shall be conducted in accordance with the arbitration rules of the United Nations Commission on International Trade Law (UNCITRAL); or with proceedings administered by the International Chamber of Commerce (ICC) and conducted under the ICC Rules of Arbitration; by one or more arbitrators appointed in accordance with said arbitration rules.

20.7.2 The place of arbitration shall be a location specified in the SCC; and the arbitration shall be conducted in the language for communications defined in Sub-Clause1.4 [Law and Language].

20.8 Alternative Arbitration Proceedings

Alternatively, the Parties may refer the matter to the Nairobi Centre for International Arbitration (NCIA) which offers a neutral venue for the conduct of national and international arbitration with commitment to providing institutional support to the arbitral process.

20.9 Failure to Comply with Arbitrator's Decision

20.9.1 The award of such Arbitrator shall be final and binding up on the parties.

20.9.2 In the event that a Party fails to comply with a final and binding Arbitrator's decision, then the other Party may, without prejudice to any other rights it may have, refer the matter to a competent court of law.

20.10 Contract operations to continue

Notwithstanding any reference to arbitration herein,

1.1.1 the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
1.1.2 the Procuring Entity shall pay the Contractor any monies due the Contractor.

Section IX - Special Conditions of Contract

The following Special Conditions shall supplement the GCC. Whenever there is a conflict, the provisions here in shall prevail over those in the GCC.

Conditions	Sub-Clause	Data
Part A - Contract Data		
Procuring Entity's name and address	Heading	The County Government of Trans Nzoia
Name and Reference No. of the Contract	Heading and 1.1	The proposed rehabilitation and modernization of Kenyatta Stadium - Phase 1A Completion.
Engineers Name and address	Heading and 3.1.1	Chief Officer Public Works Trans Nzoia County P.O. Box 4221 - 30200, Kitale
Contractor's Representative's name	4.3.1	
Key Personnel names	16.9.1	
Time for Completion	1.1.	24 WEEKS_
Defects Notification Period	1.1	_____days
Sections	1.1	
Electronic transmission systems	1.3	
Time for the Parties entering into a Contract Agreement	1.6	Within 30 days
Commencement Date	8.1.1	
Time for access to the Site	2.1.1	No later than the Commencement Date, and not later than _____days after Commencement Date
Architect Duties and Authority	3.1.6 (b) (ii)	Variations resulting in an increase of the Accepted Contract Amount in excess of__25___% shall require approval of the Procuring Entity.
Performance Security	4.2.1	The performance security will be in the form of a ____ "**performance bond**"*]* in the amount(s) of [10%] percent of the Accepted Contract Amount and in the same currency(ies) of the Accepted Contract Amount.
Normal working hours	6.5	Specify
Delay damages for the Works	8.7 & 14.15(b)	_____ % of the Contract Price per day.
Maximum amount of delay damages	8.7.1	___2.5___% of the final Contract Price.
Provisional Sums	13.6. (b)(ii)	_____%
Adjustments for Changes in Cost	13.9	Period "n" applicable to the adjustment multiplier "Pn": _____ *[*
Total advance payment	14.2.1	__% Percentage of the Accepted Contract Amount payable in the currencies and proportions in which the Accepted Contract Amount is payable ***[NOT APPLICABLE]***
Repayment amortization rate of advance payment	14.2.5 (b)	Recovery between 30%-90% of valuation on payments

Percentage of Retention	14.3.2 (c)	___10____%
Limit of Retention Money	14.3.2 (c)	_____7.5__% of the Accepted Contract Amount
Plant and Materials	14.5.3(b)(i)	If Sub-Clause 14.5 applies: Plant and Materials for payment Free on Board _____ *[list].*
	14.5.3(c)(i)	Plant and Materials for payment when delivered to the Site _____ *[list].*
Minimum Amount of Interim Payment Certificates	14.6.2	_____1.5_____ % of the Accepted Contract Amount.
Publishing source of commercial interest rates for financial charges in case of delayed payment	14.8	Specify _____% rate per month of delayed payment.
Maximum total liability of the Contractor to the Procuring Entity	17.6.2	The product of_____ *[insert a multiplier less or greater than one]* times the Accepted Contract Amount,
Periods for submission of insurance:	18.1.6	*[Insert period for submission of evidence of insurance and policy. Period may be from 14 days to 30days.]*
a. evidence of insurance.		__30___days
b. relevant policies		___30__days
Maximum amount of deductibles for insurance of the Procuring Entity's risks	18.2.4 (d)	…….
Minimum amount of third-party insurance	18.3.2	……..
The place of arbitration	20.7.2	…….

SECTION X - CONTRACT FORMS

Table of Forms

FORM No. 1 - NOTIFICATION OF INTENTION TO AWARD

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FORM No. 8 - RETENTION MONEY SECURITY

FORM NO. 9 BENEFICIAL OWNERSHIP DISCLOSURE FORM

FORM No. I - Notification of Intention to Award

[This Notification of Intention to Award shall be sent to each Tenderer that submitted a Tender.] [Send this Notification to the Tenderer's Authorized Representative named in the Tender Information Form]

FORMAT

For the attention of Tenderer's Authorized Representative

Name: ..... *[insert Authorized Representative's name]*

Address: ..... *[insert Authorized Representative's Address]*

Telephones: ..... *[insert Authorized Representative's telephone/fax numbers]*

Email Address: ..... [insert Authorized Representative's email address]

[IMPORTANT: insert the date that this Notification is transmitted to Tenderers. The Notification must be sent to all Tenderers simultaneously. This means on the same date and as close to the same time as possible.]

Date of Transmission: .....

This Notification is sent by: ..... *[email] on ..... [date] ..... (local time)*

Procuring Entity: ..... *[insert the name of the Procuring Entity]*

Contract title: ..... *[insert the name of the contract]*

Country: Kenya,

County: ..... *(if the Procuring Entity is from a County)*

This Notification of Intention to Award (Notification) notifies you of our decision to award the above contract. The transmission of this Notification begins the Standstill Period. During the Standstill Period, you may:

a) Request a debriefing in relation the evaluation of your Tender, and/or
b) Submit a Procurement-related Complaint in relation to the decision to award the contract.

1. The successful Tenderer

Name: ..... *[insert name of successful Tenderer].*

Address: ..... *[insert address of the successful Tenderer]*

Contract price: ..... *[insert contract price of the successful Tender]*

2. Other Tenderers: ***insert names of all Tenderers that submitted a Tender. If the Tender's price was evaluated include the evaluated price as well as the Tender price as read out.]***

	Name of Tenderer	**Tender price**	**Evaluated Tender price**	*Comments (if any)*

1				
2				
3				
4				
5				
6				
7				
Etc.				

1. How to request a debriefing

DEADLINE: ***The deadline to request a debriefing expires at midnight on ……. [insert date] …… (local time).***

You may request a debriefing in relation to the results of the evaluation of your Tender. If you decide to request a debriefing your written request must be made within three (3) Business Days of receipt of this Notification of Intention to Award. Provide the contract name, reference number, name of the Tenderer, contact details; and address the request for debriefing as follows:

Attention: …… *[insert full name of person, if applicable]*

Title/position: …… *[insert title/position]*

Procuring Entity: …… *[insert name of Procuring Entity]*

Email address: …… *[insert email address]*

If your request for a debriefing is received within the 3 Business Days deadline, we will provide the debriefing within five (5) Business Days of receipt of your request. If we are unable to provide the debriefing within this period, the Standstill Period shall be extended by five (5) Business Days after the date that the debriefing is provided. If this happens, we will notify you and confirm the date that the extended Standstill Period will end. The debriefing may be in writing, by phone, video conference call or in person. We shall promptly advise you in writing how the debriefing will take place and confirm the date and time.

If the deadline to request a debriefing has expired, you may still request a debriefing. In this case, we will provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of the Contract Award Notice.

2. How to make a complaint

Period: Procurement-related Complaint challenging the decision to award shall be submitted by midnight, …… [insert date] …… (local time).

Provide the contract name, reference number, name of the Tenderer, contact details; and address the Procurement- related Complaint as follows:

Attention: ..... *[insert full name of person, if applicable]*

Title/position: ..... *[insert title/position]*

Procuring Entity: ..... *[insert name of Procuring Entity]*

Email address: ..... *[insert email address]*

At this point in the procurement process, you may submit a Procurement-related Complaint challenging the decision to award the contract. You do not need to have requested, or received, a debriefing before making this complaint. Your complaint must be submitted within the Standstill Period and received by us before the Standstill Period ends.

In summary, there are four essential requirements:

a) You must be an 'interested party'. In this case, that means a Tenderer who submitted a Tender in this tendering process, and is the recipient of a Notification of Intention to Award.
b) The complaint can only challenge the decision to award the contract.
c) You must submit the complaint within the period stated above.
d) You must include, in your complaint, all of the information necessary to support your case.
e) The application must be accompanied by the fees set out in the Procurement Regulations, which shall not be refundable (information available from the Public Procurement Authority at www.ppoa.go.ke.

3. Standstill Period

a) DEADLINE: The Standstill Period is due to end at midnight on ..... [insert date] ..... (local time).

i) The Standstill Period lasts ten (14) Days after the date of transmission of this Notification of Intention to Award.

ii) The Standstill Period may be extended as stated in Section 4 above.

If you have any questions regarding this Notification please do not hesitate to contact us. On behalf of the Procuring Entity:

Name: ..... Title and Position: .....

Signature: ..... Date: .....

FORM NO. 2 - REQUEST FOR REVIEW

FORM FOR REVIEW (r.203 (1))

PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD

APPLICATION NO……. OF ……. 20 ……...

BETWEEN

……..……. APPLICANT

AND

……RESPONDENT (Procuring Entity)

Request for review of the decision of the……. (Name of the Procuring Entity of ……dated the…day of ……20…….in the matter of Tender No……..…of ……20…. for ..... (Tender description).

REQUEST FOR REVIEW

I/We……, the above named Applicant(s), of address: Physical address……. P.O. Box No ……. Tel. No……. Email ……, hereby request the Public Procurement Administrative Review Board to review the whole/part of the above mentioned decision on the following grounds namely:

1.

2.

By this memorandum, the Applicant requests the Board for an order/orders that:

1.

2.

SIGNED ……. (Applicant) Dated on……. day of ……/…20……

FOR OFFICIAL USE ONLY Lodged with the Secretary Public Procurement Administrative Review Board on……day of ……....20…..……

SIGNED

Board Secretary

FORM NO. 3 - LETTER OF AWARD

[Letter head paper of the Procuring Entity] [Date]

FORMAT

To: …… *[name and address of the Contractor]*

This is to notify you that your Tender dated …….. *[date]* for execution of the …… *[name of the Contract and identification number, as given in the SCC]* for the Accepted Contract Amount …….. *[amount in numbers and words]* …….. *[name of currency]*, as corrected and modified in accordance with the Instructions to Tenderers, is hereby accepted by our Agency.

You are requested to furnish the Performance Security within 30 days in accordance with the Conditions of Contract, using, for that purpose, one of the Performance Security Forms included in Section X, Contract Forms, of the tender document.

We attach a copy of the Contact for your Authorized Signature:

Name and Title of Signatory: ……

Name of Agency: ……

Attachment: Contract Agreement

FORM NO. 4 – CONTRACT AGREEMENT

THIS AGREEMENT made the _____ day of _____, _____, between

_____ of _____ (hereinafter "the Procuring Entity"), of the one part, and _____ of _____ (herein after "the Contractor"), of the other part:

WHEREAS the Procuring Entity desires that the Works known as _____ _____ should be executed by the Contractor, and has accepted a Tender by the Contractor for the execution and completion of these Works and the remedying of any defects therein, The Procuring Entity and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.

   a) The Letter of Acceptance
   b) The Letter of Tender
   c) The addenda Nos (if any)
   d) The Particular Conditions
   e) The General Conditions;
   f) The Specification
   g) The Drawings; and
   h) The completed Schedules and any other documents forming part of the contract.

3. In consideration of the payments to be made by the Procuring Entity to the Contractor as specified in this Agreement, the Contractor hereby covenants with the Procuring Entity to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. The Procuring Entity hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Kenya on the day, month and year specified above.

Signed by: _____

(For the Procuring Entity)

Signed by: _____

(For the Contractor)

FORM NO. 5 - PERFORMANCE SECURITY

(Unconditional Demand Bank Guarantee)

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: ..... *[insert name and Address of Procuring Entity]*

Date: ..... *[Insert date of issue]*

PERFORMANCE GUARANTEE No.: .....

Guarantor: ..... *[Insert name and address of place of issue, unless indicated in the letterhead]*

1. We have been informed that ..... (herein after called "the Applicant") has entered into Contract No. dated with the Beneficiary, for the execution of ..... (herein after called "the Contract").

2. Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

3. At the request of the Applicant, we as Guarantor, here by irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (__),[1] such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

4. This guarantee shall expire, no later than the ..... Day of ..... 2...[2], and any demand for payment under it must be received by us at this office indicated above on or before that date.

5. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed *[six months] [one year]*, in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

_____

[Name of Authorized Official, signature(s) and seals/stamps]

Note: ***All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.***

[1] The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, less provisional sums, if any, and denominated either in the currency (cies) of the Contract or a freely convertible currency acceptable to the Beneficiary.

[2] Insert the date twenty-eight days after the expected completion date as described in GC Clause 11.9. The Procuring Entity should note that in the event of an extension of this date for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Procuring Entity might consider adding the following text to the form, at the end of the pen ultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

FORM No. 6 - PERFORMANCE SECURITY OPTION 2– (Performance Bond)

[Note: Procuring Entities are advised to use Performance Security–Unconditional Demand Bank Guarantee instead of Performance Bond due to difficulties involved in calling Bond holder to action]

[**Guarantor letterhead or SWIFT identifier code**]

Beneficiary: ..... *[insert name and Address of Procuring Entity]* Date: ..... *[Insert date of issue]*

PERFORMANCE BOND No.: .....

Guarantor: ..... *[Insert name and address of place of issue, unless indicated in the letter head]*

1. By this Bond _____ as Principal (hereinafter called "the Contractor") and _____] as Surety (hereinafter called "the Surety"), are held and firmly bound unto _____] as Obligee (hereinafter called "the Procuring Entity") in the amount of for the payment of which sum well and truly to be made in the types and proportions of currencies in which the Contract Price is payable, the Contractor and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

2. WHEREAS the Contractor has entered into a written Agreement with the Procuring Entity dated the day of, 20 , for in accordance with the documents, plans, specifications, and amendments thereto, which to the extent here in provided for, are by reference made part hereof and are herein after referred to as the Contract.

3. NOW, THEREFORE, the Condition of this Obligation is such that, if the Contractor shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Contractor shall be, and declared by the Procuring Entity to be, in default under the Contract, the Procuring Entity having performed the Procuring Entity's obligations there under, the Surety may promptly remedy the default, or shall promptly:

    1) Complete the Contract in accordance with its terms and conditions; or

    2) Obtain a tender or tenders from qualified tenderers for submission to the Procuring Entity for completing the Contract in accordance with its terms and conditions, and upon determination by the Procuring Entity and the Surety of the lowest responsive Tenderers, arrange for a Contract between such Tenderer, and Procuring Entity and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "Balance of the Contract Price," as used in this paragraph, shall mean the total amount payable by Procuring Entity to Contractor under the Contract, less the amount properly paid by Procuring Entity to Contractor; or

3) Pay the Procuring Entity the amount required by Procuring Entity to complete the Contract in accordance with its terms and conditions up to a total not exceeding the amount of this Bond.

4. The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

5. Any suit under this Bond must be instituted before the expiration of one year from the date of the issuing of the Taking-Over Certificate. No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Procuring Entity named here in or the heirs, executors, administrators, successors, and assigns of the Procuring Entity.

6. In testimony whereof, the Contractor has here unto set his hand and affixed his seal, and the Surety has caused these presents to be sealed with his corporate seal duly attested by the signature of his legal representative, this _____day of _____, 20____ .

SIGNED ON _____ on behalf of _____

By _____ in the capacity of _____

In the presence of

SIGNED ON _____ on behalf of _____

By _____ in the capacity of _____

FORM NO. 7 - ADVANCE PAYMENT SECURITY

[Demand Bank Guarantee]

[Guarantor letterhead or SWIFT identifier code]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: ……. *[Insert name and Address of Procuring Entity]* **Date:** ……... *[Insert date of issue]*

ADVANCE PAYMENT GUARANTEE No.: ……. *[Insert guarantee reference number]*

Guarantor: …… *[Insert name and address of place of issue, unless indicated in the letterhead]*

1. We have been informed that …… (herein after called "the Applicant") has entered into Contract No. ……. Dated ……... with the Beneficiary, for the execution of …… (herein after called" the Contract").

2. Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum ……. () is to be made against an advance payment guarantee.

3. At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of ……. ()[1] upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:

   a) Has used the advance payment for purposes other than the costs of mobilization in respect of the Works; or
   b) Has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

4. A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Applicant on its account number _____ at _____

5. The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Applicant as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, less provisional sums, has been certified for payment, or on the _____ day of _____,2___,[2] whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

6. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.

_____

[Name of Authorized Official, signature(s) and seals/stamps]

Note: *All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.*

[1]*The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency (ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Procuring Entity.*

[2]*Insert the expected expiration date of the Time for Completion. The Procuring Entity should note that in the event of an extension of the time for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Procuring Entity might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."*

FORM NO. 8 - RETENTION MONEY SECURITY

[Demand Bank Guarantee]

[Guarantor letterhead]

Beneficiary: ..... *[Insert name and Address of Procuring Entity]* Date: ..... *[Insert date of issue]*

ADVANCE PAYMENT GUARANTEE No.: .....

[Insert guarantee reference number]

Guarantor: ..... *[Insert name and address of place of issue, unless indicated in the letterhead]*

1. We have been informed that ..... *[insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture]* (herein after called" the Contractor") has entered into Contract No. ..... *[Insert reference number of the contract]* dated ..... with the Beneficiary, for the execution of ..... *[insert name of contract and brief description of Works]* (herein after called" the Contract").

2. Furthermore, we understand that, according to the conditions of the Contract, the Beneficiary retains moneys up to the limit set forth in the Contract ("the Retention Money"), and that when the Taking-Over Certificate has been issued under the Contract and the first half of the Retention Money has been certified for payment, and payment of [insert the second half of the Retention Money] is to be made against a Retention Money guarantee.

3. At the request of the Contractor, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ _____ [insert amount in figures] _____ _____ ([insert amount in words])[1] upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or show grounds for your demand or the sum specified therein.

4. A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the second half of the Retention Money as referred to above has been credited to the Contractor on its account number at _____ [insert name and address of Applicant's bank].

5. This guarantee shall expire no later than the..... Day of……..., 2…[2], and any demand for payment under it must be received by us at the office indicated above on or before that date.

6. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.

_____

[Name of Authorized Official, signature(s) and seals/stamps]

Note: ***All italicized text (including foot notes) is for use in preparing this form and shall be deleted from the final product.***

[1] *The Guarantor shall insert an amount representing the amount of the second half of the Retention Money.*

[2] *Insert a date that is twenty-eight days after the expiry of retention period after the actual completion date of the contract. The Procuring Entity should note that in the event of an extension of this date for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee.*

FORM NO. 9 BENEFICIAL OWNERSHIP DISCLOSURE FORM

INSTRUCTIONS TO TENDERERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE FORM

This Beneficial Ownership Disclosure Form ("Form") is to be completed by the successful tenderer. In case of joint venture, the tenderer must submit a separate Form for each member. The beneficial ownership information to be submitted in this Form shall be current as of the date of its submission.

For the purposes of this Form, a Beneficial Owner of a Tenderer is any natural person who ultimately owns or controls the Tenderer by meeting one or more of the following conditions:

- *Directly or indirectly holding 25% or more of the shares.*
- *Directly or in directly holding 25% or more of the voting rights.*
- *Directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Tenderer.*

Tender Reference No.: _____ *[insert identification no]* Name of the Assignment: _____ *[insert name of the assignment]* to: _____ *[insert complete name of Procuring Entity]*

In response to your notification of award dated _____ *[insert date of notification of award]* to furnish additional information on beneficial ownership: _____ *[select one option as applicable and delete the options that are not applicable]*

(i) We here by provide the following beneficial ownership information.

Details of beneficial ownership

Identity of Beneficial Owner	**Directly or indirectly holding 25% or more of the shares** **(Yes / No)**	**Directly or indirectly holding 25 % or more of the Voting Rights** **(Yes / No)**	**Directly or indirectly having the right to appoint a majority of the board of the directors or an equivalent governing body of the Tenderer** **(Yes / No)**
[include full name (last, middle, first), nationality, country of residence]			

OR

(ii) We declare that there is no Beneficial Owner meeting one or more of the following conditions: directly or indirectly holding 25% or more of the shares. Directly or indirectly holding 25% or more of the voting rights. Directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Tenderer.

OR

We declare that we are unable to identify any Beneficial Owner meeting one or more of the following conditions. [If this option is selected, the Tenderer shall provide explanation on why it is unable to identify any Beneficial Owner]

Directly or indirectly holding 25% or more of the shares. Directly or indirectly holding 25% or more of the voting rights.

Name of the Tenderer: _____

**[insert complete name of the Tenderer]*

Name of the person duly authorized to sign the Tender on behalf of the Tenderer: _____

*_____ ** [insert complete name of person duly authorized to sign the Tender]*

Title of the person signing the Tender: _____

[insert complete title of the person signing the Tender]

Signature of the person named above: _____ [insert signature of person whose name and capacity are shown above]

Date signed _____ [insert date of signing] day of _____ [Insert month], _____ [insert year]

COUNTY GOVERNMENT OF TRANS NZOIA

THE PROPOSED REHABILITATION AND MODERNIZATION OF KENYATTA STADIUM - PHASE 1A COMPLETION.

Tender No. ……...2026/2027.

BILLS OF QUANTITIES

Architects
COUNTY ARCHITECT
PUBLIC WORKS
BOX 4211 30200 KITALE

Quantity Surveyors
COUNTY QS
PUBLIC WORKS
BOX 4211 30200 KITALE

Structural Engineers
COUNTY STRUCTURAL ENGINEER
PUBLIC WORKS
BOX 4211 30200 KITALE

Electrical & Mechanical Engineers
COUNTY MECH & ELEC ENGINEER
PUBLIC WORKS
BOX 4211 30200 KITALE

ISSUED BY;
CHIEF OFFICER,
DEPARTMENT OF PUBLIC WORKS AND ENERGY, TRANS-NZOIA COUNTY,
P.O. BOX 4211-30200,
KITALE

October 2026

THE PROPOSED REHABILITATION AND MODERNIZATION OF KENYATTA STADIUM - PHASE 1A COMPLETION BUILDERS WORK.

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	PARTICULAR PRELIMINARIES				
	BILL NO.1				
	PARTIES				
A	The "EMPLOYER" is COUNTY GOVERNMENT OF TRANS NZOIA P.O. BOX 4211 - 30200, KITALE EMAIL :info@transnzoia.go.ke				
B	The "PROJECT ARCHITECT" COUNTY ARCHITECT P.O. BOX 4211 - 30200, KITALE				
C	The "PROJECT QUANTITY SURVEYOR" COUNTY QUANTITY SURVEYOR P.O. BOX 4211 - 30200, KITALE				
D	The "PROJECT STRUCTURAL AND CIVIL ENGINEER" COUNTY STRUCTURAL ENGINEER P.O. BOX 4211 - 30200, KITALE				
E	The " MECH AND ELEC ENGINEER" COUNTY MECH AND ELEC ENGINEER P.O. BOX 4211 - 30200, KITALE				
	Carried to Collection				

A	**PRICING ITEMS OF PRELIMINARIES** Prices SHALL BE INSTERTED against Items of "Preliminaries" in the tenderer's priced Bills of Quantities. Where no price is inserted the Contractor shall be deemed to have included in his prices or rates for the various items in the Bills of Quantities or Specification for all such costs involved in complying with all the requirements for the proper execution of the whole of the works in the Contract. The contractor is advised to read and understand all preliminary items.				
B	**DESCRIPTION OF THE WORKS** The building on reinforced concrete raft, strip and/or bases foundations, columns, beams, suspended slabs staircase and a lift shaft including solid concrete block & stone walls plastered and painted. Roofs are waterproofed reinforced concrete slabs with concrete tiles and a parapet wall. All external doors are glazed aluminium, windows are in aluminium, curtain walling. All internal doors are flush solid/semi solid core with veneered finish and mahogany panelled doors,glazed aluminium All partitions are powder coated aluminum with laminated glass Floor finishes are in granite slab,marble slab, granito tiles, porcelain, carpet ,carpet tiles, etc Ceilings are in suspended acoustic tiles on T-profiled aluminium sections hang on, gypsum and some areas plaster and paintwork Balustrading and railing are stainless & mild steel railing Kitchen cabinets are in veneered MDF blockboard External works are site clearance & preparatory works, roads and parking areas in cobble stones , footpaths in PCC slabs, stormwater drainage, foul water drainage, water reticulation, electrical reticulation and soft landscaping. Electrical works include supply and installation of all electric fittings in accordance with engineer’s directions.				
C	**FLOOR AREAS** The total built up area is approximate 6108 Square Metres approximately. The total built up area is given without warranty but for guidance only. **Carried to Collection**				

B	**MEASUREMENTS** In the event of any discrepancies arising between the Bills of Quantities and the actual works, the site measurements shall generally take precedence. However, such discrepancies between any contract documents shall immediately be referred to the PROJECT MANAGER in accordance with Clause 22 of the Conditions of Contract. The discrepancies shall then be treated as a variation and be dealt with in accordance with Clause 22 of the said Conditions.				
C	**LOCATION OF SITE** The site of the proposed works is situated in Kitale Town. Those submitting tenders May visit the site and obtain more information from the procurement office before submission of their bids. The Contractor shall be deemed to have verified for themselves following:- (a) The nature of the site (b) The amount of clearing and cutting and fillings and therefore ready with the right equipment. (c) The nature of existing communication by road or otherwise. (d) The availability of land for the erection and positioning of all temporary structures, plant and materials necessary for the execution of the works. No claim will be allowed for travelling or other expenses, which may be incurred by the contractor in visiting the site or preparing the tender for the works.				
	Carried to Collection				

A	**LABOUR CAMPS** The contractor shall be allowed to house labour on site to the approval of the Project Architect . The contractor to make arrangements to transport additional labour not housed on site to and from site on a daily basis.				
B	**OFFICES, STORES AND SHEDS** The contractor shall set up to the approval of the Architect a Ample temporary watertight sheds in the premise for his own use and the use of the sub-contractors for the proper storage and protection of materials vulnerable to theft,weather remove when ordered.				
C	**TEMPORARY STRUCTURES** The contractor shall allow for providing and clearing away on completion of the works such temporary hoarding , rubbish chutes, gates, planked walkways, guard rails etc. as may be necessary for the protection of the workers, the general public, and for the proper execution of the works. As such, temporary structures shall be constructed with the approval of the Architect and to his full satisfaction and in such a manner as to cause minimum incisiveness and disturbance to occupants of adjacent building, entry and exit to the existing building and users of the adjacent roads. All such temporary structures shall comply in all aspects with the national laws, rules, and regulations currently in force and applicable to such structures. All temporary structures shall be erected in a manner that the unloading of materials causes minimum obstruction to the use of adjacent roads and other facilities All temporary structures shall be kept properly lighted throughout the periods of darkness and any corners or projections shall be painted white. Temporary structures shall not be used or permitted to be used for advertisement purposes except with the consent of the Architect All temporary structures shall be maintained at all times in good order and good condition to the satisfaction of the Architect All temporary structures shall be removed when so required by the Architect or at the end of the period for which it is required The Contractor shall indemnify and shall keep the employer indemnified against any expenses, loss, claim or suits arising out of or in connection with the temporary structures. The Contractor shall pay all local authority or other charges payable in connection with temporary structures				
	Carried to Collection				

A	**CLAIMS** It shall be a condition of this contract that upon it becoming reasonably apparent to the Contractor that he has incurred losses and/or expenses due to any of the contract conditions, or by any other reason whatsoever, he shall present such claimor intent to claim notice to the PROJECT MANAGER within the contract period. No claims shall be entertained upon the expiry of the said contract period.				
B	**TEMPORARY HOARDING AND CATCHMENTS SHUTTERING AROUND WORKING AREAS** Temporary hoarding shall be provided all around the site. The tenderers amount for hoarding shall be deemed to be inclusive of all legally demandable fees for the temporary hoarding by the Local and Central Authorities. The layout and details of the hoarding has been attached and shall include the following:- 1. The hoarding shall be overall 3000mm high constructed in new prepainted gauge 28 galvanised box profile IT5 sheets mounted on steel framing and adequately supported by steel props, bearers and brackets at appropriate centres with 1500mm street shed roof on both sides finished with prepainted gauge 25 galvanised box profile IT5 roofing sheets on steel support including gutters, downpipes, protection road Kerbs, bollards all to the entire satisfaction and approval of the Architect and Structural Engineers.(approximately 300 L.M @.....) Vehicular and pedestrian gates shall be provided. 2. Provide a complete covered walkway and road shed finished with prepainted gauge 28 galvanised box profile IT5 roofing sheets on steel support including gutters, downpipes, kerbs and bollards and street lighting(approximately 200 S.M @.....) 3. The external surfaces of the hoarding will be primed and painted with undercoat and one finishing coat gloss oil plant. 4. Advertisements on the hoarding will only be allowed with the express approval of the Architect. The Contractor shall allow for thoroughly maintaining the hoarding and gates throughout the contract and clearing away and making good disturbed ground on completion. All materials arising will remain the property of the Contractor and he should allow credit against this.				
	Carried to Collection				

A	**TELEPHONE** The contractor shall provide a telephone facilities (fixed or mobile) on site throughout the duration of the contract for use by the project manager. He shall also maintain the phone in permanent working condition and pay all charges for the duration of the Contract.				
B	**WATCHING, LIGHTING AND CCTV** The Contractor shall provide at his own risk and cost all watching as necessary to safeguard the works, plants and materials against damage and theft.				
C	**TEMPORARY DISPOSAL OF RAIN WATER** The Contractor shall provide and maintain all necessary temporary gutters, downpipes, chutes, drains etc. for conveying rainwater from the buildings. The Contractor shall allow for temporary drainage plumbing and piping for keeping the premises and site free from accumulation of water. The Contractor shall allow for draining flood water out of the site				
D	**PROJECT SITE OFFICE** The Contractor shall provide through hiring or Constructing a site office where directed on site and as designed by the Architect. He shall maintain the temporary office for the sole use of the Employer, Consultants, Clerk of Works and himself. He shall provide, erect and maintain a western type water closet for the sole use of the above users, including making temporary connections to drain where applicable to the satisfaction of the Government and Medical Officers of Health and shall pay all conservancy charges and keep both office and closet in a clean and sanitary condition and dismantle and make good disturbed surfaces to the satisfaction of the Architect on completion of the works. The office and closet shall be completed before the Contractor is permitted to commence the Works. (Approximate area of the office space 200 square metres) - as per attached drawing				
	Carried to Collection				

A	**SITE OFFICE COMPUTERS, CAMERA AND PRINTERS** Provide a provisional sum of Kenya shillings two million only for the purchase, maintenance and operationalization of the clerk of work's office This shall include computers, laptop, UPS, printers, necessary office equipment and safety gear to the run the project successfully for the project period of 36 months. Allow for Contractor's profits and overheads (.....%)				
B	**PROJECT MANAGEMENT EXPENSES** The Contractor is required to make provisions to the satisfaction of the Project Manager Provide a provisional sum of Kenya shillings …… Allow for Contractor's profits and overheads (.....%)				
C	**CLERK OF WORKS EXPENSES** The Contractor is required to make provisions to the satisfaction of the Project Manager for the following items Provide a provisional sum of Kenya shillings …… Allow for Contractor's profits and overheads (.....%)				
	Carried to Collection				

A	**CONTRACTOR'S SUPERINTENDENCE/ SITE AGENT** The Contractor shall constantly keep on the works a literate English fluent speaking Agent or Representative, competent and experienced in the kind of work involved, who shall give his whole time to the superintendence of the works. Such Agent or Representative shall receive on behalf of the Contractor, directions and instructions from the Architect and such directions and instructions shall be deemed to be given to the Contractor in accordance with conditions of Contract. The Agent shall not be replaced without the specific approval of the Architect.				
B	**SUFFICIENCY OF TENDER** The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the Works and the rates and the prices stated in the Bills of Quantities. Rates and prices quoted shall cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the Works.				
D	**BID SECURITY** The tenderer shall provide a Bid Security as prescribed in the Invitation to Tenderers				
E	**URGENCY OF THE WORKS** The Contractor is notified that these **"Works are Urgent"** and should be completed within the period state in these Particular Preliminaries. The Contractor shall allow in his rates for any costs he deems that he/she may incur by having to complete the works within the stipulated contract period.				
F	**TRANS NZOIA COUNTY APPROVALS** The Contractor shall pay for County Government Approvals				
	Carried to Collection				

PARTICULAR INSERTIONS TO BE MADE IN APPENDIX TO CONTRACT AGREEMENT

The following are the insertions to be made in the appendix to the Contract Agreement:-

1. Period of Final measurements - **Three (3) Months** from Practical Completion

2. Defects liability Period - **Twelve (12) Months** from Practical Completion

3. Date for Possession - **To be agreed with Project Manager**

4. Liquidated and Ascertained Damages - **As per special conditions of contract**

5. Percentage of Certificate value retained - **10%**

6. Limit of Retention Fund - **5% of Contract Sum**

7. Performance Security to be-**10% of Contract Sum**

Carried to Collection

Section No. 1

PARTICULAR PRELIMINARIES

SECTION SUMMARY- PARTICULAR PRELIMINARIES

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Carried to Grand Summary

BILL No. 1
PARTICULAR PRELIMINARIES

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	GENERAL PRELIMINARIES				
	BILL NO.2				
	ABBREVIATIONS				
A	Throughout these Bills, units of measurement and terms are abbreviated and shall be interpreted as follows:-				
	m3/C.M. Shall mean cubic metre m2/S.M. Shall mean square metre m/L.M. Shall mean linear metre mm/MM Shall mean Millimetre Kg. Shall mean Kilogramme No. Shall mean Number Prs. Shall mean Pairs B.S. Shall mean the British Standard Specification Published by the British Standards Institution, 2 Park Street, London W.I England. Ditto: Shall mean the whole of the preceding description except as qualified in the description in which it occurs. m.s. Shall mean measured separately. a.b.d Shall mean as before described. P.M. Shall mean Project Manager				
B	**EXCEPTION TO THE STANDARD METHOD OF MEASUREMENT** Attendance ; Clause B19(a) of the Standard Method of Measurement is deleted and the following clause is substituted:-				
	Attendance on Nominated Sub-Contractors shall be given as an iteming each case shall be deemed to include: allowing use of standing scaffolding, mess rooms, sanitary accommodation and welfare facilities; provision of special scaffolding where necessary; providing space for office accommodation and for storage of plant and materials; providing light and water for their work: clearing away rubbish; unloading checking and hoisting: providing electric power and removing and replacing duct covers, pipe casings and the like necessary for the execution and testing of Sub- Contractors' work and being responsible for the accuracy of the same.				
	Carried to Collection			**Ksh**	

A	**FORM OF CONTRACT** The Form of Contract shall be as stipulated in the Republic of Kenya's Standard Tender Document for Procurement of Building Works (..... Edition) included herein. These are numbered from .. to.. as set out in pages .. to .. of these tender documents. Particulars of insertions to be made in the Appendix to the Contract Agreement will be found in the Particular Preliminaries part of these Bills of Quantities				
B	**STAMP DUTY CHARGES** The Contractor shall allow for the payment of all stamp duty charges in connection with the Performance Bond and Contract Agreement.				
C	**SITE LEVELS** Before commencing work the Contractor must arrange for and agree with the Architect, Engineer and Quantity Surveyor the existing site levels and similarly establish and agree on a bench mark.				
D	**SETTING OUT** The contractor shall set out works in accordance with the dimensions and levels shown on the drawings and shall be responsible of the correctness of all dimensions and levels set out by him and he will be required to amend all errors arising from inaccurate setting out at his own cost and expenses. In the event of any error or discrepancy in the dimensions or levels marked on the drawings being discovered, such errors or discrepancies must be reported by the contractor to the architect for his immediate attention. No work shall be commenced by the contractor until he has received written instructions from the Architect to adjust such discrepancies which may be proved, upon receipt of such instructions and no claim for extra expenses or relief from the provisions of the Conditions of the Contract , any discrepancy or error in the dimensions or levels shown on the drawings may be made thereafter. Before any work is commenced by Sub-Contractors or specialist firms, dimensions must be checked on the site and/or building and agreed with the Contractor irrespective of the comparable dimensions shown on the drawings. The Contractor shall be responsible for the accuracy of such dimensions.				
	Carried to Collection			**Ksh**	

A	**SAMPLES** The contractor shall furnish at the earliest possible opportunity before work commences and at his own cost any samples of materials or workmanship that may be called for by the Project Manager for his approval or rejection. The project manager may reject any materials or workmanship not in his opinion to be up to approved samples. The contractor shall furnish at the earliest possible. the work to which they apply. The Contractor shall ensure their protection against theft, loss or damage.				
B	**EXISTING PROPERTY AND ADJACENT PROPERTY** The contractor shall take every precaution to avoid damage to all existing and adjacent property including buildings, roads, cables, drains and other services and he will be held responsible for all damages hereto arising from the execution of his contract and he shall make good all such damages when directed at his own expense to the satisfaction of the Architect.				
C	**EXISTING SERVICES** Prior to commencement of any work the contractor is to ascertain from the relevant Authorities the exact position, depth and level of all existing electric cables, water pipes and all other services in the area and he shall make whatever provisions may be required by the authorities concerned for the support and protection of such services. Any damage or disturbances caused to any service shall be reported immediately to the Architect and the relevant Authority and shall be made good to their satisfaction at the contractor's expense. Through temporary interference with existing sewer or any drains, whether for the purpose of diverting, lifting, laying or making connections, the Contractor shall at his own expense provide timber troughs, pipes or other channels and if required, pumping appliances for maintaining the flow through the respective diversions. Where removal or disconnection of such service lines is required to be carried out under the Contract, the operations must be carried out in co-ordination with the relevant Local Service Authority so as to minimize any disruption of services to the surrounding buildings and to enable them not make any precautions necessary and to make any alternative arrangement for the temporary provision of the services affected.				
	Carried to Collection			**Ksh**	

	The Contractor shall be held responsible for and shall indemnify the Employer against all losses and expenses incurred as a result of such damage and disruption of services.				
A	**MATERIALS, TOOLS, PLANT AND SCAFFOLDINGS** All materials and workmanship used in the execution of the works shall be of the best quality and description. Any materials for the works condemned by the Architect shall immediately be removed from the site at the Contractor's expense. All materials and workmanship shall unless otherwise specified or described conform to the appropriate British Standards Institution specification current at the date of tender The works throughout shall be executed by skilled workmen well versed in their respective trades. The Contractor shall order all materials to be obtained from overseas immediately after the Contract is signed and shall also order materials to be obtained from local sources as early as necessary to ensure that they are on site when required for use in the works. The Bills of Quantities shall not be used for the purpose of ordering materials. The contractor shall be responsible for the provision of all materials,hoists,Tower cranes, tackle, plant, vehicles, tools and appliances scaffolding, transport and workmen required for the works except in so far as may be stated otherwise herein and he shall allow for the provision of the foregoing The contractor shall provide, erect and maintain all temporary scaffolding, sufficiently strong and efficient for the due performance of the Works including Sub-Contractors works, provide special scaffolding as required by the Sub-Contractors, alter and adapt all scaffolding as and when required during the works and remove on completion and make good. No timber used for scaffolding, formwork or similar purpose shall be used afterwards in the permanent works. The Contractor shall allow for all costs related to hoisting his or his Sub-Contractor's materials for fixing at any level within the limits shown on the drawings or included in the general description of the works. All such plant, tools and scaffolding shall comply with all regulations whether general or local in force throughout the period of the contract and shall be required as may be necessary to comply with any amendments in or additions to such regulations				
	Carried to Collection			**Ksh**	

A	**SIGN FOR MATERIALS SUPPLIED.** The Contractor will be required to sign a receipt for all articles and materials supplied by the PROJECT MANAGER at the time of taking deliver thereof, as having received them in good order and condition, and will thereafter be responsible for any loss or damage and for replacements of any such loss or damage with articles and/or materials which will be supplied by the PROJECT MANAGER at the current market prices including Customs Duty and V.A.T., all at the Contractor's own cost and expense, to the satisfaction of the PROJECT MANAGER				
B	**LOCAL REGULATIONS AND BY-LAWS** The contractor is to comply with all local regulations and by-laws of the Local Authority including serving notices and paying of fees. In addition to complying with the Factories act (Cap 514) and the Factories Amendment act (1990), the contractor shall comply in all aspects with the above mentioned rules. The contractor will be held responsible for serving on the chief inspector of factories a written notice not later than seven days after the beginning of the building operations included in this contract stating the particulars required.				
C	**GOVERNMENT ACTS AND REGULATIONS, STATUTORY LEVIES** The contractor is to comply with all government acts and regulations including serving notices and paying of fees. The tender price must include for all costs arising or resulting from compliance with any Act, Order or Regulation. such as Standard Levy, Capacity Building Levy under Public Procurement and Disposal Act and all costs arising or resulting from any Law requiring payment by the Contractor of any Statutory Levy or Levies currently in force The Contractor shall be required to indemnify the Employer for any claims arising out of non- compliance with the above requirements.				
D	**TRANSPORT TO AND FROM THE SITE** The contractor shall include in his prices for the transport of materials, workmen etc to and from the site of the proposed works at such hours and by such routes as are permitted by the Authorities.				
	Carried to Collection			**Ksh**	

A	**SECURITY OF WORKS** The contractor shall be entirely responsible and shall pay security of all works, stores, materials, plant, personnel etc both his own and sub-contractors and shall also provide all necessary watching, lighting, and other precautions as necessary to ensure the security, the safety and protection of the public.				
B	**PUBLIC, PRIVATE ROADS AND PAVEMENTS ETC** The contractor will be required to make good at his own expense any damages he may cause to the present approach road surfaces, pavements, paths, storm water channels, fences etc during the period of the works to the satisfaction of the Local and other competent Authority and the Architect.				
C	**POLICE REGULATIONS AND TRAFFIC** The contractor is to allow for complying with all Government Acts, orders or regulations in connection with employment of labour and other matters related to the execution of the works. The contractor must acquaint himself duly with current acts and regulations, including police regulations regarding the movement, housing, security and control of labour, labour camps, passes for transport, etc.. It is most important that the Contractor, before tendering, shall obtain from the relevant Authority the fullest information regarding all such regulations and/or restrictions which may affect the organization of the works, supply and control of labour, etc and allow accordingly in his tender. The Contractor will be required to agree the access route to the site with the Employer and relevant statutory authorities before commencement of the Contract Works and must adhere to this route throughout the course of the Contract, unless agreed otherwise. The Contractor will also be required to observe certain traffic rules and regulations pertaining to the use by his vehicles of the roads adjacent to the site. These rules and regulations should be investigated by him at the commencement of the Contract.				
	Carried to Collection			**Ksh**	

A	**PERFORMANCE BOND** The Contractor shall find and submit the name of one surety who shall be an approved Kenyan Bank and who will be bound to: COUNTY GOVERNMENT OF TRANS NZOIA in an amount equal to Ten per cent (10%) of the Contract amount for the due performances of the Contract up to the date of completion as certified by the Architect and who will when and if called upon sign a Bond to that effect without the addition of any limitations.				
B	**AREA TO BE OCCUPIED BY CONTRACTOR** The area of the site which may be occupied by the contractor for use as storage and for the purpose of erecting workshops etc shall be defined on the site by the Architect and the Contractor must confine his activities to the areas so marked and must ensure that his own and his subcontractors workmen do not trespass on the adjoining property.				
C	**PROGRESS SCHEDULE / PROGRAMME OF WORKS** The Contractor shall furnish to the Architect within 14 days of the possession of site a Time progress Chart for approval and display in the site offices showing the time and order in which he proposes to carry out the works within the total construction time stated in the contract. The chart will show in detail the construction time and order in which each section of the work is to be carried out and be sub-divided into trades and tasks. If the contractor proposes sectional completion of the project he must plan this in detail including access roads, and services and this shall be reflected on the chart				
D	**WATER FOR THE WORKS** The contractor shall provide at his own risk and cost all water for use in connection with the works including the work of sub-contractors and shall make arrangements with the local authority or water suppliers for the installation of a separate meter for all water used by him throughout the contract and pay all costs and fees in connection therewith. He shall also provide temporary storage tanks and tubing etc as he may consider necessary and clear away at completion or when no longer required. All water shall be fresh, clean and pure, free from earthly vegetable or organic matter, acid or alkaline substance in solution or suspension and shall be tested whenever required by the Architect.				
	Carried to Collection			**Ksh**	

A	**LIGHTING AND POWER** The contractor shall provide at his own risk and cost all temporary artificial lighting and power for use on the works including all sub-contractors and specialists requirements and including all temporary connections, wiring, fittings etc and clearing away on completion. The Contractor shall pay all fees, bills and obtain all permits in connection therewith without charge to subcontractors. No claims due to lack of electricity or due to power fluctuations will be accepted				
B	**MATERIAL TEST** Allow for testing all installations required to be tested and provide everything necessary for this purpose and leave in perfect working order to the satisfaction of the Architect and Local Authority. Allow for all expenses in connection with testing of materials as specified hereunder including the supply and preparation of materials and their packing and conveyance to an approved Materials Testing Laboratory, Laboratory charges, etc. The following tests will be measured according to the number of tests actually called for by the Architect and carried out but unsuccessful tests will not be included in the measurement.				
C	**ACCESS TO SITE AND TEMPORARY ROADS** Means of access to the site shall be agreed with the Architect prior to commencement of the works and the Contractor must allow for building and maintaining any temporary access roads for the transport of materials, plant and workmen as may be required for the complete execution of the works including the provision of temporary culverts, crossings, bridges or any other means of gaining access.				
	Carried to Collection			**Ksh**	

	The Contractor must also allow for keeping the existing Public Highways and Roads clean and for making good all damage to the satisfaction of the Architect and relevant Authorities. Upon the completion the works the Contractor shall remove such temporary roads, temporary culverts bridges etc and make good and reinstate all works and services disturbed to the satisfaction of the Architect.				
A	**SANITATION OF THE WORKS** The sanitation of the works shall be provided, maintained and removed on completion by the Contractor to the satisfaction of the Architects, health department and local Authorities. The sanitation shall be for the use by Contractors and sub-Contractors workmen etc without charge. The Latrine/toilet shall be enclosed plastered and painted masonry wall, corrugated sheets roofs ,with concrete tiled floors to facilitate washing. Their location shall be agreed with the Architects and the works shall not be commenced before the sanitary accommodation has been approved by the above mentioned authorities. The Contractor will be required to pay all conservancy charges and shall ensure clean daily maintenance and disinfecting of the latrines/toilet, and not less than once per week, the whole area shall be sprayed with disinfectant and insecticides and any temporary drains shall be removed and all works and surfaces disturbed made good and then the whole area disinfected and left clean and free from pollution to the satisfaction of the Architect and local authorities.				
B	**SAFETY, HEALTH AND WELFARE OF WORKERS** The Contractor shall allow for providing for the safety, health and welfare of work people and for complying with any relevant Ordinances, Regulations or Union Agreement In addition to complying with the requirements of the Occupational Safety & Health Act 2007 and the Factories Act, the Contractor and Sub-Contractors shall be required to comply in all respects with the Factories (Building Operations and Work of Engineering Construction) rules together with the Construction Safety Plan in compliance with International Labour Organizations (ILO) Regulations.				
	Carried to Collection			**Ksh**	

	The Contractor will further be required to identify a Site Safety Officer in accordance with the above Rules who will be responsible for the health and safety of workers on the site. The Contractor will also be required to provide approved good quality hard hats, gumboots and other necessary protective gear for all workers on site including Sub-Contractors workers and also for the exclusive use by the Clerk of Works and representatives of the Employer and Consultants. The Tenderers attention is drawn to the fact that the Employer reserves the right to hold back the amount priced against this Clause either in full or in part due to any non-performance on the Contractors part of his obligations under this Clause. The tenderers attention is further drawn to the fact that he is required to submit with his tender a detailed write-up on how he intends to implement the above Construction Safety Plan. It should be noted that this write-up will form a heavily weighted criteria in the evaluation of the tenders. Adequate temporary Notices and Signs shall be posted to indicate e.g. that building operations are in progress and entry is at ones own risk or trespassers are liable to be prosecuted or such other Notices and Signs as the Architect may consider necessary from time to time. The design and location of such signs will be to the approval of the Architect.				
A	**SIGN BOARD** The Contractor shall provide and erect where directed and maintain during the whole period of the building operation and remove at completion one approved temporary notice board to the Architect's standard design giving a brief description of the works and showing the names of the employer, Contractor and the consultants, with sufficient space to append the names of the sub-contractors and suppliers when known. The lettering concerning the Architect, Quantity Surveyor and Engineer is not to be more than 50mm high. Allow for maintaining existing **SIGN BOARD ON SITE**		NA		
	Carried to Collection			**Ksh**	

A	**PROTECTION OF THE WORK** The Contractor shall cover up and protect from damage, including damage from inclement rainy weather, all finished work contained in these Bills of Quantities, and unfixed materials including that of Sub-Contractors liable to damage including provision of casing up, temporary roof, gutters, drains etc until the completion of the works and removal of the same when no longer required and make good any damage which may nevertheless have been done at completion free of charge to the Employer.				
B	**PREVENTION OF DISTURBANCE AND NUISANCE** Tenderers should note that normal activities shall be continuing in the surrounding buildings during the construction period. Minimum disturbance by noise, dust, water or movement of vehicles, materials, labour or plant must be caused to the function of the existing adjacent buildings in the vicinity and the occupants and staff therein. The Contractor shall comply with all instructions issued by the Employer or Architect with regard to minimizing such disturbances. The Contractor shall not directly or indirectly or otherwise by himself or through his agents cause nuisance. Should he do so he shall be directly responsible for such acts.				
C	**INSURANCE** The Contractor shall insure as required in Conditions No. 30 of the Conditions of Contract and as per Section IV the Appendix to Conditions of Contract. No payment on account of the work executed will be made to the Contractor until he has satisfied the Architect either by production of an Insurance Policy or and Insurance Certificate that the provision of the foregoing Insurance Clauses have been complied with in all respects. Thereafter the Architect shall from time to time ascertain premiums are duly paid up by the Contractor who shall if called upon to do so, produce the receipted premium renewals for the Architect inspection.				
	Carried to Collection			**Ksh**	

	Some of the insurances required include but not limited to: 1. Insurance for the Works 2. Insurance for Third Party 3.Insurance for Contractor's employees and workmen 4. Insurance against loss or damage of Plant, Machinery and Equipment 5. Provide full insurance for adjacent property. Not withstanding the above, the Contractor shall specifically take insurance for the full value of the following adjacent buildings a) Adjacent Labs Provide insurance for personal injury or death insurance. The Contractor shall further indemnify the Employer against all claims arising out of the execution of the Contract Works.				
A	**CLEANING, REMOVAL OF PLANT AND RUBBISH ETC** The Contractor shall upon completion of the works remove and clear away all temporary buildings, scaffolding, plant, rubbish and unused materials, surplus excavated materials and shall leave the whole of the site of the works in a clean and tidy state to the satisfaction of the Architect, including clearing away and making good all traces of dirt.				
B	**WORKS TO BE DELIVERED UP CLEAN** Clean and flush all gutters, rainwater and waste pipes, manholes and drains, wash (except where such treatment might cause damage) and clean all floors, sanitary fittings, glass inside and outside and any other parts of the works and remove all marks, blemishes, stains and defects from joinery, fittings and decorated surfaces generally, polish door furniture and bright parts of metalwork and leave the whole the buildings watertight, clean, perfect and fit for occupation to the approval of the Architect.				
	Carried to Collection			**Ksh**	

A	**TRAINING LEVY** The Contractor's attention is drawn to legal notice No. 237 of October 1971 which requires payment by the Contractor for a training levy on all contracts. The Contractor is required to familiarize himself with this law and allow in the preliminaries for all costs arising or resulting therefrom.				
B	**VISIT SITE AND EXAMINE DRAWINGS.** The Contractor is recommended to examine the drawings and visit the site the location of which is described in the Particular Preliminaries hereof. He shall be deemed to have acquainted himself therewith as to its nature, position, means of access or any other matter which, may affect his tender. No claim arising from his failure to comply with this recommendation will be considered.				
C	**SUPERVISION AND WORKING HOURS** The works shall be executed under the direction and to the entire satisfaction in all respects of the PROJECT MANAGER who shall at all times during normal working hours have access to the works and to the yards and workshops of the Contractor and sub-Contractors or other places where work is being prepared for the contract.				
D	**PROVISIONAL SUMS.** The term "Provisional Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7(i) of the Standard Method of Measurement mentioned in Condition No.16 of the Conditions of Contract. Such sums are net and no addition shall be made to them for profit.				
E	**PRIME COST (OR P.C.) SUMS.** The term "Prime Cost Sum" or "P.C. Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7 (ii) of the Standard Method of Measurement mentioned in Condition No. 16 of the Conditions of Contract. Persons or firms nominated by the PROJECT MANAGER to execute work or to provide and fix materials or goods as stated in Condition No. 20 of the Conditions of Contract are described herein as Nominated Sub-Contractors. Persons or firms so nominated to supply goods or materials are described herein as Nominated Suppliers.				
	Carried to Collection			**Ksh**	

A	**ADJUSTMENT OF P.C. SUMS.** In the final account all P.C. Sums shall be deducted and the amount properly expended upon the PROJECT MANAGER'S order in respect of each of them added to the Contract sum. The Contractor shall produce to the PROJECT MANAGER such quotations, invoices or bills, properly receipted, as may be necessary to show the actual details of the sums paid by the Contractor. Items of profit upon P.C. Sums shall be adjusted in the final account pro-rata to the amount paid. Items of "attendance" (as previously described) following P.C. Sums shall be adjusted pro-rata to the physical extent of the work executed (not pro-rata to the amount paid) and this shall apply even though the Contractor's priced Bill shows a percentage in the rate column in respect of them. Should the Contractor be permitted to tender and his tender be accepted of any work for which a P.C. Sum is included in these Bill of Quantities profit and attendance will be allowed at the same rate as it would be if the work were executed by a Nominated Sub-Contractor.				
B	**ADJUSTMENT OF PROVISIONAL SUMS.** In the final account all Provisional Sums shall be deducted and the value of the work properly executed in respect of them upon the PROJECT MANAGER's order added to the Contract Sum. Such work shall be valued as described for Variations in Conditions No. 13 of the Conditions of Contract, but should any part of the work be executed by a Nominated Sub-Contractor, the value of such work or articles for the work to be supplied by a Nominated Supplier, the value of such work or articles shall be treated as a P.C. Sum and profit and attendance comparable to that contained in the priced Bills of Quantities for similar items added.				
C	**PROGRESS CHART.** The Contractor shall provide within two weeks of Possession of Site and in agreement with the PROJECT MANAGER a Progress Chart for the whole of the works including the works of Nominated Sub-Contractors; one copy to be handed to the PROJECT MANAGER and a further copy to be retained on Site. Progress to be recorded and chart to be amended as necessary as the work proceeds.				
	Carried to Collection			**Ksh**	

A NOMINATED SUB-CONTRACTORS

When any work is ordered by the PROJECT MANAGER to be executed by nominated sub-contractors, the Contractor shall enter into sub-contracts as described in Condition No. 8 of the Conditions of Contract and shall thereafter be responsible for such sub-contractors in every respect. Unless otherwise described the Contractor is to provide for such Sub-Contractors any or all of the facilities described in these Preliminaries. The Contractor should price for these with the nominated Sub-contract Contractor's work concerned in the P.C. Sums under the description "add for Attendance".

B DIRECT CONTRACTS

Notwithstanding the foregoing conditions, the County Government reserves the right to place a "Direct Contract" for any goods or services required in the works which are covered by a P.C. Sum in the Bills of Quantities and to pay for the same direct. In any such instances, profit relative to the P.C. Sum the priced Bills of Quantities will be adjusted as described for P.C. Sums and allowed.

C ATTENDANCE UPON OTHER TRADESMEN, ETC.

The Contractor shall allow for the attendance of trade upon trade and shall afford any tradesmen or other persons employed for the execution of any work not included in this Contract every facility for carrying out their work and also for use of his ordinary scaffolding. The Contractor, however, shall not be required to erect any special scaffolding for them. The Contractor shall perform such cutting away for and making good after the work of such tradesmen or persons as may be ordered by the PROJECT MANAGER and the work will be measured and paid for to the extent executed at rates provided in these Bills.

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A	**ALTERATIONS TO BILLS, PRICING, ETC.** Any unauthorized alteration or qualification made to the text of the Bills of Quantities may cause the Tender to be disqualified and will in any case be ignored. The Contractor shall be deemed to have made allowance in his prices generally to cover any items against which no price has been inserted in the priced Bills of Quantities. All items of measured work shall be priced in detail and the Tenders containing Lump Sums to cover trades or groups of work must be broken down to show the price of each item before they will be accepted.				
B	**BLASTING OPERATIONS** Blasting will only be allowed with the express permission of the PROJECT MANAGER in writing. All blasting operations shall be carried out at the Contractor's sole risk and cost in accordance with any Government regulations in force for the time being, and any special regulations laid down by the PROJECT MANAGER governing the use and storage of explosives.				
C	**MATERIALS ARISING FROM EXCAVATIONS** Materials of any kind obtained from the excavations shall be the property of the Government. Unless the PROJECT MANAGER directs otherwise such materials shall be dealt with as provided in the Contract. Such materials shall only be used in the works, in substitution of materials which the Contractor would otherwise have had to supply with the written permission of the PROJECT MANAGER Should such permission be given, the Contractor shall make due allowance for the value of the materials so used at a price to be agreed.				
D	**GENERAL SPECIFICATION.** For the full description of materials and workmanship, method of execution of the work and notes for pricing, the Contractor is referred to the Ministry of Roads and Public Works and Housing General Specification dated 1976 or any subsequent revision thereof which is issued as a separate document, and which shall be allowed in all respects unless it conflicts with the General Preliminaries, Trade Preambles or other items in these Bills of Quantities.				
	Carried to Collection			**Ksh**	

BILL No. 2

GENERAL PRELIMINARIES

SECTION SUMMARY- GENERAL PRELIMINARIES

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BILL No. 2
GENERAL PRELIMINARIES

PROPOSED REHABILITATION AND MODERNIZATION OF KENYATTA STADIUM PHASE 1A, COMPLETION WORKS - TRANS NZOIA COUNTY

No	Description	Unit	Qnty	Rate	Amount
	VVIP PAVILION (1 NO.)				
	1.1 ROOFING				
	ROOF CONSTRUCTION				
	Framed structural steel framework, including all necessary welds, site welds, cleats, bolts, rivets, plates and sundry fixings, priming with red oxide primer, painting of exposed steelwork with two coats gloss oil paint, delivered to site and fixing in position.				
	ROOF COVERING				
	Prepainted Iron Sheets on ready roof carcass m/s.				
A	24 Gauge, IT5 pre- painted box profile galvanised iron sheet including j-bolts nuts and washers all fixed according to manufacturers instructions	m2	228		
B	Ditto ridge capping	m	59		
C	Ditto valley trough	m	121		
	Roof underlay				
D	Super sisalation 420 heavy industrial or equal and approved roof underlay; fixed to mild steel purlins (m/s) with and including fixing to manufacturer's specifications; curved in width and depth	m2	580		
	Polycarbonate sheets				
E	10mm Thick polycarbonate sheet with rubber lipping fixed to mild steel purlins (m.s) with and including 70x6mm galvanised drive screws with PVC washers as described in:-	m2	352		
	FASCIA AND BARGE BOARDS (PROVISIONAL) 4mm Thick mild steel plate fixed on and including 40x40mm SHS framing welded to mild steel trusses as described in:-				
F	Fascias	m2	-		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	WATERPROOFING TO ROOF SLABS				
	Surface Preparation				
A	Hack-off concrete surfaces to expose the aggregates, clean the dust to receive waterproofing material (m.s)	m2	529		
	Prepare and apply "Coprox" or equal and approved waterproofing material in accordance with manufacturer's printed instructions and specifications with a ten year guarantee as described on:-				
B	Roof terrace surfaces to approved falls	m2	529		
C	150mm High skirting	m	114		
D	Extra over waterproofing for sealing coprox material or approved equivalent around rainwater inlet (m.s).	No	6		
	A letter of guarantee shall be required for the waterproofing				
	12mm Thick cement and sand (1:3) screed laid to falls finished to receive floor finish (m.s) on:-				
E	Roof terraces	m2	529		
	Concrete floor tiles as supplied by EUROCON TILES LTD. (or equivalent) laid to approved pattern, bedded and pointed in matching cement slurry and waterproofed grout as described on:-				
F	Roof terraces	m2	529		
G	150mm High skirting	m	114		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	ROOF DRAINAGE (PROVISIONAL)				
	Unplasticized PVC rainwater pipes and fittings solvent welded joints:-				
A	100mm diameter down uPVC class C pipe secured to wall with and including steel brackets or cast in RC works	m	60		
B	Exra over for shoe/outlet	No	6		
C	Ditto fulbora inlet	No	6		
	Purpose made Galvanised mild steel Box Gutter and fittings; 24 gauge				
D	300 x 200mm box gutter; soldered joints bent as necessary and held in place with brackets at 1500mm centres	m	30		
E	Extra over for ends	No	2		
F	Extra over for rain water outlets; for 100mm diameter downpipe (m/s)	No	6		
	Prepare and apply two undercoats and one finishing coat gloss oil paint to				
G	Galvanised metal surfaces	m2	57		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	1.2 SUN BREAKERS				
	SUN-SHADING				
	Structural steel work (all provisional)				
	The following in framed structural steel framework, including all necessary welds, site welds, cleats, bolts, rivets, plates and sundry fixings, priming with red oxide primer, painting of exposed steelwork with two coats gloss oil paint, delivered to site and fixing in position.				
A	60 x 2mm Thick horzontal bars welded onto the frame (2.9Kg/M CHS)	kg	1,914		
B	150 x 2mm Thick frame welded/bolted together (7.85Kg/M CHS)	kg	864		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	1.3 DOORS				
	TIMBER DOORS				
	Wrot prime grade mahogany or other equal and approved hardwood with maximum moisture content 12%, well seasoned and pressure impregnated with approved preservative as fabricated by "Woodmakers (Kenya) Ltd" (or equivalent) as described in:-				
A	Beadings	m	120		
B	25x25mm Quadrant	m	267		
C	50x20mm Architrave	m	533		
D	Ex.150mm wide x 50mm (minimum) Thick frame fixed to wall with and including 250mm girth x 25 x 1.6mm galvanised mild steel cramps fixed at maximum 600mm centres on each jamb	m	128		
E	Ditto transome with four labours	m	20		
F	100x50mm Thick frame fixed to wall with and including 250mm girth x 25 x 1.6mm galvanised mild steel cramps fixed at maximum 600mm centres on each jamb	m	139		
	45mm Thick semi solid flush doors faced both sides with 6mm Thick mahogany veneer plywood and 4mm Thick hardwood lipping all round:-				
G	Single leaf/single swing door overall size 900x2100 mm high - C(32)01	No	5		
H	Ditto but with 18 gauge aluminium louvred bottom vent overall size 500x300mm - C(32)02	No	15		
I	Single leaf/single swing door overall size 650x2000 mm high - C(32)03	No	28		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	MILD STEEL CASEMENT DOORS				
	Supply, assemble and fix the following purpose made mild steel lsaement door comprising 100x50x4mm Thick RHS frame, top and middle rail; 150x50x4mm Thick RHS bottom stile infilled with 8mm Thick clear toughened glass (m.s); primed with one coat red oxide before delivery to site; complete with and including 1.5 pairs heavy duty bush hinges, 3-Lever Union Dead lock, approved pull handles, heavy duty purpose made hasp/staples with black rubber door stop, tower bolts; building in lugs to jambs, plugging and screwing to head and sill; and bedding frames in water proof cement and sand (1:3) mortar; and pointing in approved mastic including oiling, easing and adjusting				
A	Door overall size 1500x2700mm high comprising 1500x2100mm high double leaf/single swing and 18 gauge mild steel 1500x600mm high top louvred ventilation- C(31)03	No	9		
B	French Door overall size 3000x2700mm high comprising 1500x2100mm high double leaf/single swing door, 2No. 650x2100mm fixed side lights and 3000x600mm fanlight - C(31)02	No	3		
C	Ditto 4800x2700mm high comprising 1500x2100mm high double leaf/single swing door, 2No. 1650x2100mm fixed side lights and 3000x600mm fanlight - C(31)01	No	1		
	Mild steel burglar proofing grille as described in:-				
D	Door openings to approved patern	m2	74		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	MILD STEEL LOUVRED DOORS				
	Supply, assemble and fix the following purpose made mild steel louvred door comprising 100x50x4mm Thick RHS frame, top and middle rail; 150x50x4mm Thick RHS bottom stile infilled with and including 18 gauge mild steel louvres welded to frames; primed with one coat red oxide before delivery to site; complete with and including 1.5 pairs heavy duty bush hinges, 3-Lever Union Dead lock, heavy duty purpose made hasp/staples with black rubber door stop; building in lugs to jambs, plugging and screwing to head and sill; and bedding frames in water proof cement and sand (1:3) mortar; and pointing in approved mastic including oiling, easing and adjusting				
A	Single leaf/single swing door overall size 950x2100mm high - C(32)06	No	2		
B	Double leaf/single swing door overall size 1800x2700mm high - C(31)04	No	2		
	GLAZING				
	8mm Thick toughened glass and glazing to metal doors				
C	In panes not exceeding 0.10 square metres	m2	74		
	8mm Thick clear glass fanlight fixed to timber with glazing beads (m.s) as described:-				
D	In panes not exceeding 0.50 square meters	m2	3		
	18 gauge powder coated aluminium louvres as described in:-				
E	900x500mm top ventilation	No	15		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	IRONMONGERY				
	Supply and fix the following approved quality ironmongery as supplied by "UNION" (or equivalent) with matching screws :-				
A	100x2mm Thick stainless steel hinges complete with matching screws	Pairs	72		
B	Medium duty door closer	No	33		
C	3-Lever mortice door lock set complete with stainless steel handles and matching screws	No	20		
D	Ditto dealock	No	13		
E	Door signage to approval	No	20		
F	Rubber door stop rawl bolted to concrete floor	No	74		
G	Stainless steel indicator bolt	No	28		
H	450mmm high stainless steel pull handles back to back to approval	No	56		
J	Alumnium pull handles as per ETNA or approved equivalent	No	52		
K	Ditto coat hook	No	56		
L	230x100mm stainless steel push plate	No	28		
M	900x150x2.0mm Thick stainless steel kick/crush plate on both sides of timber doors to approval	No	38		
N	150mm stainless steel butt hinges matching with screws	Pairs	39		
P	Tower bolt	No	26		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	PAINTING AND DECORATION				
	Prepare and apply one coat aluminium wood primer to back of frames before fixing to:-				
A	Surfaces over 200mm but not exceeding 300mm girth	m	148		
B	Ditto: 100-200 mm girth	m	139		
C	Ditto: 0-100 mm girth	m	653		
	Prepare, knot, prime, stop and apply two undercoats and one finishing coat of polyurethane varnish as supplied by CROWN BERGER LTD. (or equivalent) to wood work as dedecribed:-				
D	General timber surfaces	m2	196		
E	Timber surfaces between 200-300 mm girth	m	148		
F	Ditto: 100-200 mm girth	m	139		
G	Ditto: 0-100mm girth	m	653		
	Touch up primer prepare and apply three coats gloss oil paint as supplied by CROWN BERGER LTD. (or equivalent) on:-				
H	General metal surfaces	m2	174		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	1.4 WINDOWS				
	WINDOW CILL				
	Precast concrete class 20 fair faced in all exposed surfaces bedded and jointed cement and sand (1:3) mortar as desscribed in:-				
A	250x75mm Thick cill with 10mm drip, secretly fixed to wall jambs at the bottom with and including 35x3mm mild steel weather bar	m	95		
B	Cut and pin ends of window cills	No	80		
	CASEMENT WINDOWS				
	Supply, assemble and fix the following purpose made steel casement windows in heavy duty 50x6mm Thick 'Z' & "T" steel frame and mullion sections respectively with one coat lead oxide primer, standard pressed metal permanent vent filled with non-corroding metal or plastic mosquito gauze to full width of sash, including cutting and pinning fixing lugs to walling and bedding in waterproof cement mortar (1:4) and pointing in approved mastic externally to the following window openings. Windows complete with and including brass stays and fasteners as described in:-				
C	Window opening overall size 3000x2100mm high comprising 3000x600mm 18 gauge mild steel louvred ventilation; 3000x1500mm glazed section - C(31)05	No	2		
D	Window opening overall size 2100x750mm high - C(31)06	No	24		
E	Ditto 2100x1800mm high - C(31)07	No	9		
F	Ditto 2400x5550mm high - C(31)10	No	5		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Mild steel burglar proofing grille as described in:-				
A	Window openings to approved patern	m2	151		
	GLAZING				
	8mm Thick frosted glass and glazing to metal windows				
B	In panes not exceeding 0.10 square metres	m2	38		
	8mm Thick clear sheet glass and glazing to metal windows				
C	In panes not exceeding 0.10 square metres	m2	110		
	WINDOW BOARDS				
	Wrot prime grade mahogany or other equal and approved hardwood with maximum moisture content 12%, well seasoned and pressure impregnated with approved preservative as supplied by "Woodmakers (Kenya) Ltd" (or equivalent) as described in:-				
D	Ex 150x25mm window board with bull nosed edge secretly fixed to jambs	m	40		
E	Ex 25x25mm quadrant secretly fixed to underside of window board	m	40		
	PAINTING AND DECORATION				
	Prepare and apply one coat of aluminium wood primer to back of frames before fixing to:-				
F	Timber surfaces over 200mm but not exceeding 300mm girth	m	40		
G	Ditto 0-100 mm girth	m	40		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Prepare, knot, prime, stop and apply two undercoats and one finishing coat of polyurethane varnish as supplied by CROWN BERGER LTD. (or equivalent) to wood work as described:-				
A	Timber surfaces between 200-300 mm girth	m	40		
B	Ditto 0-100mm girth	m	40		
	Touch up primer prepare and apply three coats gloss oil paint as supplied by CROWN BERGER LTD. (or equivalent) on:-				
C	General metal surfaces	m2	604		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	1.5 FINISHES				
	WALL FINISHES				
	EXTERNAL WALL FINISHES				
	15 mm Thick cement and sand (1:3) render, finished with wood float to:-				
A	Masonry wall and concrete surfaces	m2	1,317		
	10mm Deep half round neat horizontal joints (key pointing) in cement and sand mortar (1:3) as described in:-				
B	Stone wall surfaces	m2	396		
	Prepare and apply three coats approved exterior quality paint as described on:-				
C	Prepared wall and concrete surfaces	m2	1,317		
	INTERNAL WALL FINISHES				
	Cement and sand (1:4) backings				
D	15mm Thick to receive ceramic wall tiles (m.s)	m2	911		
E	Ditto to stone wall surfaces to receive paint (m.s)	m2	1,845		
F	Ditto concrete surfaces to receive paint (m.s)	m2	1,372		
	Surface preparation by skim coating				
G	Prepare and apply premixed joint compound from approved manufacturer to plastered wall and fair faced concrete surfaces to receive paint (m.s)	m2	3,253		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Prepare and apply one undercoat and two finishing coats of first quality silk vinyl paint as supplied by CROWN BERGER LTD. (or equivalent) on:-				
A	Prepared wall and concrete surfaces	m2	3,253		
	300x300x6mm Thick glazed "Quality" ceramic wall tiles laid in approved pattern on cement and sand backing with cement slurry, waterproofed grout and pointing to match				
B	Walls	m2	911		
C	Extra over 100mm decorative dado tiles	m	434		
D	Ditto PVC corner strips	m	225		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	FLOOR FINISHES				
	APPLIED FLOOR FINISHES				
	Power float finish				
A	Protect, flatten and smoothen external concrete surfaces to approval	m2	5		
	Cement and sand (1:3) screeds, backings, beds etc				
B	40nn Thick smooth screed	m2	29		
C	Ditto textured hardened screed	m2	196		
D	32mm Thick screed finished to receive porcelain floor tiles (m.s)	m2	991		
E	Ditto Eurocon concrete pavers (m.s)	m2	376		
F	100x15mm Thick skirting	m	82		
	600x600x10mm Thick non-slip porcelain floor tiles in approved pattern, bedded and pointed in matching cement slurry and waterproofed grout as described on:-				
G	Floors	m2	991		
H	100mm skirting	m	439		
	300x300x10mm Thick Eurocon concrete floor tiles in approved pattern, bedded and pointed in matching cement slurry and waterproofed grout as described on:-				
J	Floors	m2	376		
K	100mm skirting	m	209		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	STAIRCASE FINISHES				
	Cement and sand (1:3) screeds, backings, beds etc				
A	32mm Thick bed finished to receive porcelain floor tiles (m.s)	m2	68		
	600x600x10mm Thick non-slip porcelain floor tiles in approved pattern, bedded and pointed in matching cement slurry and waterproofed grout as described on:-				
B	Landing	m2	11		
C	Tread 300mm wide	m	72		
D	Riser 150mm high	m	76		
E	100mm High skirting	m	19		
F	Open string of staircase 350mm (maximum) girth	m	22		
G	Wall string 250mm (maximum) high	m	22		
	CEILING FINISHES				
	UNDERSIDES OF SEATING TERRACES AND STAIRCASES				
	15 mm Thick cement and sand (1:3) render, finished with wood float to:-				
H	Sloping soffits of terrace slab	m2	629		
J	Horizontal soffits of terrace slab	m2	1,465		
K	Ditto landing	m2	21		
L	Sloping soffits of stairs	m2	28		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Surface preparation by skim coating				
A	Prepare and apply premixed joint compound from approved manufacturer to plastered ceiling surfaces to receive paint (m.s)	m2	2,129		
	Prepare and apply one undercoat and two finishing coats of first quality silk vinyl paint as supplied by CROWN BERGER LTD. (or equivalent) on:-				
B	Plastered soffits of terrace slab	m2	2,093		
C	Ditto landing	m2	21		
D	Ditto stairs	m2	17		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	1.6 BALUSTRADING & RAILING				
	UPSTAND BEAM				
	Reinforced concrete class 20 in:-				
A	Upstand beam to receive balustrades (m.s)	m3	18		
	Sawn formwork to:-				
B	Sides of beams	m2	95		
	PODIUM BALUSTRADING				
	900mm high stainless steel balustrade consisting of 75mm diameter x 3mm thick handrail, 50mm diameter x 3mm thick balusters at 1200mm centres complete with footplate and fish tailed hookd grouted into tread, 20mm diameter x 3mm intermediate (1No) and botton (1No) rails complete and infilled with 10mm toughened glass; including building balusters into mortcie in concrete; including all bends and wreaths all welded together and polishing to architects approval				
C	Horizontal balustrade to podium	m	16		
	EXTERNAL & INTERNAL STAIRCASES				
	900mm high stainless steel balustrade consisting of 75mm diameter x 3mm thick handrail, 50mm diameter x 3mm thick balusters at 1200mm centres complete with footplate and fish tailed hookd grouted into tread, 20mm diameter x 3mm intermediate (1No) and botton (1No) rails complete and infilled with 10mm toughened glass; including building balusters into mortcie in concrete; including all bends and wreaths all welded together and polishing to architects approval				
D	Raking balustrade to stairacses	m	32		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	TERRACE SEATING				
	Mild steel rolled hollow sections; all joints 6mm fillet welded; including grinding all welds smooth and painting with red oxide primer before delivery to site				
A	950mm high balustrading comprising 75mm diameter x 2mm Thick CHS hand railing welded onto 50mm diameter x 2mm CHS balusters grouted onto concrete upstand beam (m.s) at 1250mm centres; 38mm diameter x 2mm intermediate horizontal rails welded at 200mm centres to approval	m	181		
	Touch up primer prepare and spray paint three coats gloss oil paint on:-				
B	General metal surfaces	m2	362		
	RAMP				
	Mild steel rolled hollow sections; all joints 6mm fillet welded; including grinding all welds smooth and painting with red oxide primer before delivery to site				
C	950mm high balustrading comprising 75mm diameter x 2mm Thick CHS hand railing welded onto 50mm diameter x 2mm CHS balusters grouted onto concrete upstand beam (m.s) at 1250mm centres; 38mm diameter x 2mm intermediate horizontal rails welded at 200mm centres to approval	m	93		
	Touch up primer prepare and spray paint three coats gloss oil paint on:-				
D	General metal surfaces	m2	185		
	Totals carried to VVIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	1.7 VANITY AND KITCHEN TOPS AND FIXTURES				
	KITCHEN AND VANITY TOPS (PROVISIONAL)				
	Reinforced insitu concrete class 20 in:-				
A	65mm Thick top with and including A 193 mild steel fabric mesh	m2	10		
B	Ditto fascia to profile	m2	3		
	Sawn formwork to:-				
C	Edge of suspended slab not exceeding 100mm high	m	16		
D	Soffits of suspended slab including boxing around vanity wash hand basin opening	m2	10		
	Insitu cement and sand (1:3) screeded beds, with steel trowelled finish , on concrete				
E	15mm Thick to receive granite and marble finishes (m.s)	m2	20		
	20mm Thick granite finish laid to approved pattern, bedded, zero-jointed and pointed in matching cement slurry and waterproofed grout as described on:-				
F	Vanity tops	m2	20		
G	100mm High wall skirting/dado	m	33		
H	200mm High fascia to profile	m	33		
	1.8 BUILDERS WORK IN CONNECTION WITH SERVICES				
I	Allow for builders work in connection with mechanical and electrical installation services	Item	1	100,000	100,000
	Totals carried to VVIP collection page.				

No	Description				Amount
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	TOTAL FOR VVIP PAVILION (1 NO.) CARRIED TO GRAND SUMMARY				

No	Description	Unit	Qnty	Rate	Amount
	VIP PAVILION (2 NO.)				
	2.1 ROOFING				
	ROOF CONSTRUCTION				
	Framed structural steel framework, including all necessary welds, site welds, cleats, bolts, rivets, plates and sundry fixings, priming with red oxide primer, painting of exposed steelwork with two coats gloss oil paint, delivered to site and fixing in position.				
	The following in 4No. Type T3 truss spanning 30700mm hoisted and placed in position at 12000mm above ground floor				
A	Take from storage and fix 400x300x15mm Thick truss-column anchorage plates drilled with 6 number holes of 18mm diameter holes for anchorage. (18No. Plates total)	kg	128		
B	15mm thick mild steel plate stiffener complete with 6mm thick fillet weld.	m	6		
	High yield strength Bolts and Anchors				
C	Take from storage and fix HD 20mm diameter rawl bolt with nut and washer , length 600mm embedded in concrete	no	30		
D	150x150x6mm Thick SHS external and main internal memb	kg	5,533		
E	75x75x4mm Thick SHS internal members	kg	1,782		
F	UC 152x152x23 Unversal Column Steel section 23kg/lm	kg	336		
G	100x100x3mm Thick SHS internal members	kg	478		
H	125x125x4mm Thick SHS internal member	kg	125		
	The following in 5No. Type T4 truss spanning 24750mm hoisted and placed in position at 12000mm above ground floor				
I	150x150x6mm Thick SHS external and main internal members	kg	6,711		
J	75x75x4mm Thick SHS internal members	kg	1,800		
K	UC 152x152x23 Unversal Column Steel section 23kg/lm	kg	345		
L	100x100x3mm Thick SHS internal members	kg	782		
M	125x125x4mm Thick SHS internal member	kg	156		
	Totals carried to VIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	The following in 7No. Girders type 02 spanning 48000mm, hoisted and placed in position at 12000mm above ground floor				
A	150x150x6mm Thick SHS external members (top & bottom chords)	kg	-		
B	75x75xx4mm Thick SHS internal members	kg	4,753		
	50x50x4mm Thick SHS internal members		4,069		
	The following in 8No. Girders type 03 spanning 6300mm, hoisted and placed in position at 12000mm above ground floor				
C	150x150x6mm Thick SHS external members (top & bottom chords)	kg			
D	75x75xx4mm Thick SHS internal members	kg	408		
	Other common members				
E	179.5x50.8x2.5mm Thick "Z" purlins with 14mm Diameter holes for bolting as necessary 90	kg	5,406		
E2	Take from storage and fix Ditto	kg	1,352		
F	50x50x6mm RSA	kg	260		
G	12mm Diameter anti-sag rods	kg	187		
	CONECTING PLATES & RAWL BOLTS				
	CONECTING PLATES				
H	Take from storage and fix 600 x100 x10mm Thick plates with 18r	kg	1,131		
I	ditto 475 x100 x10mm Thick plates with 18mm diameter slotted h	kg	60		
J	ditto 240 x240 x12mm Thick plates with 18mm diameter slotted h	kg	445		
K	ditto 600 x300 x10mm Thick plates with 22mm diameter slotted h	kg	382		
L	ditto300 x 280 x10mm Thick plates with 18mm diameter slotted holes	kg	89		
M	ditto 120 x100 x 30 x 4mm Thick L-shaped cleat plates with 14mm diameter slotted holes	kg			
N	ditto290 x 280 x12mm Thick plates with 22mm diameter slotted h	kg	276		
O	ditto 100 x 70 x 12mm Thick plates stiffeners	kg	129		
P	ditto100 x 75 x 10mm Thick plates stiffeners	kg	97		
Q	ditto 100 x 100 x 15mm Thick plates stiffeners	kg	12		
	NUTS AND BOLTS				
R	20mm diameter nut and bolts	No	252		
S	Take from storage and fix 16mm diameter nut and bolts	No	632		
	RAWL BOLTS				
T	16mm diameter rawl bolts 120mm long	No	14		
	Take from storage and fix 600 x100 x10mm Thick plates with 18mm diameter slotted holes	No	40		
	Totals carried to VIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	ROOF COVERING				
	Prepainted Iron Sheets.				
A	24 Gauge, IT5 pre- painted box profile galvanised iron sheet including j-bolts nuts and washers all fixed according to manufacturers instructions	m2	772		
B	Ditto ridge capping	m	130		
C	Ditto valley trough	m	246		
	Roof underlay				
D	Super sisalation 420 heavy industrial or equal and approved roof underlay; fixed to mild steel purlins (m/s) with and including fixing to manufacturer's specifications; curved in width and depth	m2	1,492		
	Polycarbonate sheets				
E	10mm Thick polycarbonate sheet with rubber lipping fixed to mild steel purlins (m.s) with and including 70x6mm galvanised drive screws with PVC washers as described in:-	m2	720		
	FASCIA AND BARGE BOARDS (PROVISIONAL)				
	4mm Thick mild steel plate fixed on and including 40x40mm SHS framing welded to mild steel trusses as described in:-				
F	Fascias	m2	173		
G	Take from storage and fix Ditto	m2	72		
	WATERPROOFING TO ROOF SLABS				
	Surface Preparation				
H	Hack-off concrete surfaces to expose the aggregates, clean the dust to receive waterproofing material (m.s)	m2	110		
	Prepare and apply "Coprox" or equal and approved waterproofing material in accordance with manufacturer's printed instructions and specifications with a ten year guarantee as described on:-				
I	Roof terrace surfaces to approved falls	m2	110		
	Totals carried to VIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
E A	Extra over waterproofing for sealing coprox material or approved equivalent around rainwater inlet (m.s).	No	6		
B	150mm High skirting	m	118		
	A letter of guarantee shall be required for the waterproofing				
	12mm Thick cement and sand (1:3) screed laid to falls finished to receive floor finish (m.s) on:-				
C	Roof terraces	m2	110		
	Concrete floor tiles as supplied by EUROCON TILES LTD. (or equivalent) laid to approved pattern, bedded and pointed in matching cement slurry and waterproofed grout as described on:-				
D	Roof terraces	m2	110		
E	150mm High skirting	m	118		
	ROOF DRAINAGE (PROVISIONAL)				
	Unplasticized PVC rainwater pipes and fittings solvent welded joints:-				
F	100mm diameter down uPVC class C pipe secured to wall with and including steel brackets or cast in RC works	m	50		
G	Exra over for shoe/outlet	No	5		
H	Ditto fulbora inlet	No	6		
	Purpose made Galvanised mild steel Box Gutter and fittings; 24 gauge				
I	300 x 200mm box gutter; soldered joints bent as necessary and held in place with brackets at 1500mm centres	m	3		
J	Extra over for ends	No	10		
	Totals carried to VIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
A	Extra over for rain water outlets; for 100mm diameter downpipe (m/s)	No	5		
	Prepare and apply two undercoats and one finishing coat gloss oil paint to				
B	Galvanised metal surfaces	m2	6		
	Totals carried to VIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	2.2 SUN BREAKERS				
	SUN-SHADING				
	Structural steel work (all provisional)				
	The following in framed structural steel framework, including all necessary welds, site welds, cleats, bolts, rivets, plates and sundry fixings, priming with red oxide primer, painting of exposed steelwork with two coats gloss oil paint, delivered to site and fixing in position.				
A	60 x 2mm Thick horzontal bars welded onto the frame (2.9Kg/M CHS)	kg	6,032		
B	150 x 2mm Thick frame welded/bolted together (7.85Kg/M CHS)	kg	2,669		
	2.3 WINDOW CILLS				
	Precast concrete class 20 fair faced in all exposed surfaces bedded and jointed cement and sand (1:3) mortar as desscribed in:-				
C	250x75mm Thick cill with 10mm drip, secretly fixed to wall jambs at the bottom with and including 35x3mm mild steel weather bar	m	104		
D	Cut and pin ends of window cills	No	54		
	Totals carried to VIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	2.4 FINISHES - PLASTER AND SCREEDING				
	WALL FINISHES				
	EXTERNAL WALL FINISHES				
	15 mm Thick cement and sand (1:3) render, finished with wood float to:-				
A	Masonry wall and concrete surfaces	m2	951		
	10mm Deep half round neat horizontal joints (key pointing) in cement and sand mortar (1:3) as described in:-				
B	Stone wall surfaces	m2	422		
	Prepare and apply three coats approved exterior quality paint as described on:-				
C	Prepared wall and concrete surfaces	m2	951		
	INTERNAL WALL FINISHES				
	Cement and sand (1:4) backings				
D	15mm Thick to receive ceramic wall tiles (m.s)	m2	380		
E	Ditto to stone wall surfaces to receive paint (m.s)	m2	1,550		
F	Ditto concrete surfaces to receive paint (m.s)	m2	1,368		
	FLOOR FINISHES				
	APPLIED FLOOR FINISHES				
	Power float finish				
G	Protect, flatten and smoothen external concrete surfaces to approval	m2	15		
	Cement and sand (1:3) screeds, backings, beds etc				
H	40nn Thick textured hardened screed	m2	63		
I	32mm Thick screed finished to receive porcelain floor tiles (m.s)	m2	991		
J	Ditto Eurocon concrete pavers (m.s)	m2	131		
	Totals carried to VIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	STAIRCASE FINISHES Cement and sand (1:3) screeds, backings, beds etc				
A	32mm Thick bed finished to receive porcelain floor tiles (m.s)	m2	26		
	CEILING FINISHES				
	UNDERSIDES OF SEATING TERRACES AND STAIRCASES				
	15 mm Thick cement and sand (1:3) render, finished with wood float to:-				
B	Sloping soffits of terrace slab	m2	1,111		
C	Horizontal soffits of terrace slab	m2	639		
D	Ditto landing	m2	6		
E	Sloping soffits of stairs	m2	11		
	Totals carried to VIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	2.5 BALUSTRADING & RAILING				
	UPSTAND BEAM				
	Reinforced concrete class 20 in:-				
A	Upstand beam to receive balustrades (m.s)	m3	19		
	Sawn formwork to:-				
B	Sides of beams	m2	120		
	EXTERNAL & INTERNAL STAIRCASES 900mm high stainless steel balustrade consisting of 75mm diameter x 3mm thick handrail, 50mm diameter x 3mm thick balusters at 1200mm centres complete with footplate and fish tailed hookd grouted into tread, 20mm diameter x 3mm intermediate (1No) and botton (1No) rails complete and infilled with 10mm toughened glass; including building balusters into mortcie in concrete; including all bends and wreaths all welded together and polishing to architects approval				
C	Raking balustrade to stairacses	m	25		
	TERRACE SEATING Mild steel rolled hollow sections; all joints 6mm fillet welded; including grinding all welds smooth and painting with red oxide primer before delivery to site				
D	950mm high balustrading comprising 75mm diameter x 2mm Thick CHS hand railing welded onto 50mm diameter x 2mm CHS balusters grouted onto concrete upstand beam (m.s) at 1250mm centres; 38mm diameter x 2mm intermediate horizontal rails welded at 200mm centres to approval	m	324		
	Totals carried to VIP collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Touch up primer prepare and spray paint three coats gloss oil paint on:-				
A	General metal surfaces	m2	690		
	RAMP				
	Mild steel rolled hollow sections; all joints 6mm fillet welded; including grinding all welds smooth and painting with red oxide primer before delivery to site				
B	950mm high balustrading comprising 75mm diameter x 2mm Thick CHS hand railing welded onto 50mm diameter x 2mm CHS balusters grouted onto concrete upstand beam (m.s) at 1250mm centres; 38mm diameter x 2mm intermediate horizontal rails welded at 200mm centres to approval	m	46		
	Touch up primer prepare and spray paint three coats gloss oil paint on:-				
C	General metal surfaces	m2	93		
	2.6 FIXTURES				
	KITCHEN AND VANITY TOPS (PROVISIONAL)				
	Reinforced insitu concrete class 20 in:-				
D	65mm Thick top with and including A 193 mild steel fabric mesh	m2	8		
E	Ditto fascia to profile	m2	3		
	Sawn formwork to:-				
F	Edge of suspended slab not exceeding 100mm high	m	13		
G	Soffits of suspended slab including boxing around vanity wash hand basin opening	m2	8		
	Insitu cement and sand (1:3) screeded beds, with steel trowelled finish , on concrete				
H	15mm Thick to receive granite and marble finishes (m.s)	m2	8		
	2.7 BUILDERS WORK IN CONNECTION WITH SERVICES				
I	Allow for builders work in connection with mechanical and electrical installation services	Item	1	100,000	100,000
	Totals carried to VIP collection page.				

No	Description	Unit			Amount
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	Sub-total for 1No. Wing				
	TOTAL FOR VIP PAVILION (2 NO.) CARRIED TO GRAND SUMMARY				

No	Description	Unit	Qnty	Rate	Amount
	PUBLIC TERRACE - EASTERN STAND (1 NO.)				
	3.1 WALLING				
	EXTERNAL WALLING (PROVISIONAL)				
	Medium dressed natural stone from approved quarry bedded and jointed in gauged mortar (1:3) with and including 20mm hoop iron reinforcement in other alternate course as described in:-				
A	200mm Thick externnal wall	m2	132		
B	Extra over stone walling for chisel dressing on both sides	m2	264		
	Precast concrete class 20 (12mm aggregates) including formwork, finishing fair on all exposed surfaces, and hoisting and placing in position , bedding , jointing and pointing in cement and sand (1:3) mortar				
C	275x50mm coping with 12x10mm deep drip throat on top of 200mm wall	m	110		
	EXPANSION JOINTS				
	Expansion Joint				
D	25mm Thick "Flexcell Expandite" Resin borded cork filler or equivalent joint filler to approval	m2	-		
E	25 x 25 mm 'Expendite' sealer	m	10		
	Totals carried to Eastern terrace collection page.				

No	Description	Unit	Qnty	Rate	Amount
	3.2 FINISHES				
	WALL FINISHES				
	EXTERNAL WALL FINISHES				
	15 mm Thick cement and sand (1:3) render, finished with wood float to:-				
A	Masonry wall and concrete surfaces	m2	383		
	10mm Deep half round neat horizontal joints (key pointing) in cement and sand mortar (1:3) as described in:-				
B	Stone wall surfaces	m2	132		
	Prepare and apply three coats approved exterior quality paint as described on:-				
C	Prepared wall and concrete surfaces	m2	383		
	FLOOR FINISHES				
	APPLIED FLOOR FINISHES				
	Power float finish				
D	Protect, flatten and smoothen external concrete surfaces to approval	m2	10		
	CEILING FINISHES				
	UNDERSIDES OF SEATING TERRACES AND STAIRCASES				
	15 mm Thick cement and sand (1:3) render, finished with wood float to:-				
E	Sloping soffits of terrace slab	m2	951		
	Totals carried to Eastern terrace collection page.				

No	Description	Unit	Qnty	Rate	Amount
	3.3 BALUSTRADING & RAILING				
	UPSTAND BEAM				
	Reinforced concrete class 20 in:-				
A	Upstand beam to receive balustrades (m.s)	m3	4		
	Sawn formwork to:-				
B	Sides of beams	m2	43		
	TERRACE SEATING				
	Mild steel rolled hollow sections; all joints 6mm fillet welded; including grinding all welds smooth and painting with red oxide primer before delivery to site				
C	950mm high balustrading comprising 75mm diameter x 2mm Thick CHS hand railing welded onto 50mm diameter x 2mm CHS balusters grouted onto concrete upstand beam (m.s) at 1250mm centres; 38mm diameter x 2mm intermediate horizontal rails welded at 200mm centres to approval	m	143		
	Touch up primer prepare and spray paint three coats gloss oil paint on:-				
D	General metal surfaces	m2	323		
	Totals carried to Eastern terrace collection page.				

No	Description	Unit			Amount
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	TOTAL FOR PUBLIC TERRACE - EASTERN CARRIED TO GRAND SUMMARY				

No	Description	Unit	Qnty	Rate	Amount
	PUBLIC TERRACES - NORTHERN STAND (3 NO.)				
	4.1 WALLING				
	EXTERNAL WALLING (PROVISIONAL)				
	Medium dressed natural stone from approved quarry bedded and jointed in gauged mortar (1:3) with and including 20mm hoop iron reinforcement in other alternate course as described in:-				
A	200mm Thick externnal wall	m2	61		
B	Extra over stone walling for chisel dressing on both sides	m2	122		
	Precast concrete class 20 (12mm aggregates) including formwork, finishing fair on all exposed surfaces, and hoisting and placing in position , bedding , jointing and pointing in cement and sand (1:3) mortar				
C	275x50mm coping with 12x10mm deep drip throat on top of 200mm wall	m	51		
	Totals carried to Northern terraces collection page.				

No	Description	Unit	Qnty	Rate	Amount
	4.2 FINISHES				
	WALL FINISHES				
	EXTERNAL WALL FINISHES				
	15 mm Thick cement and sand (1:3) render, finished with wood float to:-				
A	Masonry wall and concrete surfaces	m2	146		
	10mm Deep half round neat horizontal joints (key pointing) in cement and sand mortar (1:3) as described in:-				
B	Stone wall surfaces	m2	61		
	Prepare and apply three coats approved exterior quality paint as described on:-				
C	Prepared wall and concrete surfaces	m2	146		
	FLOOR FINISHES				
	APPLIED FLOOR FINISHES				
	Power float finish				
D	Protect, flatten and smoothen external concrete surfaces to approval	m2	5		
	CEILING FINISHES				
	UNDERSIDES OF SEATING TERRACES AND STAIRCASES				
	15 mm Thick cement and sand (1:3) render, finished with wood float to:-				
E	Sloping soffits of terrace slab	m2	334		
	Totals carried to Northern terraces collection page.				

No	Description	Unit	Qnty	Rate	Amount
	4.3 BALUSTRADING & RAILING				
	UPSTAND BEAM				
	Reinforced concrete class 20 in:-				
A	Upstand beam to receive balustrades (m.s)	m3	2		
	Sawn formwork to:-				
B	Sides of beams	m2	19		
	TERRACE SEATING				
	Mild steel rolled hollow sections; all joints 6mm fillet welded; including grinding all welds smooth and painting with red oxide primer before delivery to site				
C	950mm high balustrading comprising 75mm diameter x 2mm Thick CHS hand railing welded onto 50mm diameter x 2mm CHS balusters grouted onto concrete upstand beam (m.s) at 1250mm centres; 38mm diameter x 2mm intermediate horizontal rails welded at 200mm centres to approval	m	63		
	Touch up primer prepare and spray paint three coats gloss oil paint on:-				
D	General metal surfaces	m2	140		
	Totals carried to Northern terraces collection page.				

No	Description	Unit			Amount
	COLLECTION SUMMARY FOR VIP Carried From page page page		 37 38 39		
	Sub-total				
	TOTAL FOR PUBLIC TERRACE - NORTHERN X (3NO.) CARRIED TO GRAND SUMMARY				

No	Description	Unit	Qnty	Rate	Amount
	PUBLIC TERRACES - SOUTHERN STAND (3 NO.)				
	5.1 WALLING				
	EXTERNAL WALLING (PROVISIONAL)				
	Medium dressed natural stone from approved quarry bedded and jointed in gauged mortar (1:3) with and including 20mm hoop iron reinforcement in other alternate course as described in:-				
A	200mm Thick externnal wall	m2	61		
B	Extra over stone walling for chisel dressing on both sides	m2	122		
	Precast concrete class 20 (12mm aggregates) including formwork, finishing fair on all exposed surfaces, and hoisting and placing in position , bedding , jointing and pointing in cement and sand (1:3) mortar				
C	275x50mm coping with 12x10mm deep drip throat on top of 200mm wall	m	51		
	Totals carried to Southern terraces collection page.				

No	Description	Unit	Qnty	Rate	Amount
	5.2 FINISHES				
	WALL FINISHES				
	EXTERNAL WALL FINISHES				
	15 mm Thick cement and sand (1:3) render, finished with wood float to:-				
A	Masonry wall and concrete surfaces	m2	146		
	10mm Deep half round neat horizontal joints (key pointing) in cement and sand mortar (1:3) as described in:-				
B	Stone wall surfaces	m2	61		
	Prepare and apply three coats approved exterior quality paint as described on:-				
C	Prepared wall and concrete surfaces	m2	146		
	FLOOR FINISHES				
	APPLIED FLOOR FINISHES Power float finish				
D	Protect, flatten and smoothen external concrete surfaces to approval	m2	5		
	CEILING FINISHES				
	UNDERSIDES OF SEATING TERRACES AND STAIRCASES				
	15 mm Thick cement and sand (1:3) render, finished with wood float to:-				
E	Sloping soffits of terrace slab	m2	334		
	Totals carried to Southern terraces collection page.				

No	Description	Unit	Qnty	Rate	Amount
	5.3 BALUSTRADING & RAILING				
	UPSTAND BEAM				
	Reinforced concrete class 20 in:-				
A	Upstand beam to receive balustrades (m.s)	m3	2		
	Sawn formwork to:-				
B	Sides of beams	m2	19		
	TERRACE SEATING				
	Mild steel rolled hollow sections; all joints 6mm fillet welded; including grinding all welds smooth and painting with red oxide primer before delivery to site				
C	950mm high balustrading comprising 75mm diameter x 2mm Thick CHS hand railing welded onto 50mm diameter x 2mm CHS balusters grouted onto concrete upstand beam (m.s) at 1250mm centres; 38mm diameter x 2mm intermediate horizontal rails welded at 200mm centres to approval	m	63		
	Touch up primer prepare and spray paint three coats gloss oil paint on:-				
D	General metal surfaces	m2	140		
	Totals carried to Southern terraces collection page.				

No	Description	Unit			Amount
	COLLECTION SUMMARY FOR PUBLIC TERRACE - SOUTHERN				
	Carried From page		41		
	page		42		
	page		43		
	Sub-total				
	TOTAL FOR PUBLIC TERRACE - SOUTHERN X (3NO.) CARRIED TO GRAND SUMMARY				

No	Description	Unit	Qnty	Rate	Amount
	ABLUTION BLOCKS (2 NO.)				
	6.1 ROOFING				
	CONCRETE ROOF SLAB FINISHES				
	WATERPROOFING Surface Preparation				
A	Hack-off concrete surfaces to expose the aggregates, clean the dust to receive waterproofing material (m.s)	m2	88		
	Prepare and apply "Coprox" or equal and approved waterproofing material in accordance with manufacturer's printed instructions and specifications with a ten year guarantee as described on:-				
B	Roof terrace surfaces to approved falls	m2	88		
C	150mm High skirting	m	41		
D	Extra over waterproofing for sealing coprox material or equal and approved to rainwater out/inlet (m.s).	No	4		
	A letter of guarantee shall be required for the waterproofing				
	12mm Thick cement and sand (1:3) screed laid to falls on:-				
E	Roof terraces	m2	88		
	ROOF DRAINAGE				
	Rain water goods				
F	75mm diameter UPVC down pipe encased into concrete columns (m.s)	m	12		
G	Ditto down pipe shoe	No	4		
H	75mm diameter aluminium fulbora inlet to rain water downpipes	No	4		
	Totals carried to Ablution blocks collection page.				

No	Description	Unit	Qnty	Rate	Amount
	6.2 DOORS				
	TIMBER DOORS				
	Wrot prime grade mahogany or other equal and approved hardwood with maximum moisture content 12%, well seasoned and pressure impregnated with approved preservative as fabricated by "Woodmakers (Kenya) Ltd" (or equivalent) as described in:-				
A	Beadings	m	9		
B	25x25mm Quadrant	m	80		
C	50x20mm Architrave	m	160		
D	150x50mm Thick frame fixed to wall with and including 250mm girth x 25 x 1.6mm galvanised mild steel cramps fixed at maximum 600mm centres on each jamb	m	80		
E	Ditto transome with four labours	m	4		
	45mm Thick semi solid flush door faced both sides with 6mm Thick mahogany veneer plywood and 4mm Thick hardwood lipping all round as described in:-				
F	Single leaf/single swing door overall size 650x2000mm high - C(32)03	No	11		
G	Ditto 900x2100 mm high - C(32)04	No	2		
H	Ditto but with 18 gauge aluminium louvred bottom vent overall size 500x300mm - C(32)02	No	2		
	Totals carried to Ablution blocks collection page.				

No	Description	Unit	Qnty	Rate	Amount
	FANLIGHT				
	8mm Thick clear glass fanlight fixed to timber with glazing beads (m.s) as described:-				
A	In panes not exceeding 0.50 square meters	m2	1		
	18 gauge powder coated aluminium louvres as described in:-				
B	900x500mm top ventilation	No	2		
	IRONMONGERY				
	Supply and fix the following approved quality ironmongery as supplied by "UNION" (or equivalent) with matching screws :-				
C	100x2mm Thick stainless steel hinges complete with matching screws	Pairs	23		
D	3-Lever dead lock system complete with and including 19mm tubular stainless steel handles to approval	No	4		
E	Medium duty door closer to approval	No	4		
F	Stainless steel indicator bolt	No	11		
G	Ditto coat hook	No	11		
H	Door signage to approval	No	15		
I	900x150x2.0mm Thick stainless steel kick/crush plate on both sides of timber doors to approval	No	8		
J	Rubber door stop rawl bolted to concrete floor	No	15		
	Totals carried to Ablution blocks collection page.				

No	Description	Unit	Qnty	Rate	Amount
					-
	PAINTING AND DECORATION				-
	Prepare and apply one coat aluminium wood primer to back of frames before fixing to:-				
A	Timber surfaces between 100-200 mm girth	m	84		
B	Ditto 0-100 mm girth	m	160		
	Prepare, knot, prime, stop and apply two undercoats and one finishing coat of polyurethane varnish as supplied by CROWN BERGER LTD. (or equivalent) to wood work as dedecribed:-				
C	General timber surfaces	m2	56		
D	Timber surfaces between 100-200 mm girth	m	84		
E	Ditto 0-100mm girth	m	160		
	Totals carried to Ablution blocks collection page.				

No	Description	Unit	Qnty	Rate	Amount
	6.3 WINDOWS				
	WINDOW CILL				
	Precast concrete class 20 fair faced in all exposed surfaces bedded and jointed cement and sand (1:3) mortar as desscribed in:-				
A	250x75mm Thick cill with 10mm drip, secretly fixed to wall jambs at the bottom with and including 35x3mm mild steel weather bar	m	18		
B	Cut and pin ends of window cills	No	16		
	CASEMENT WINDOWS				
	Supply, assemble and fix the following purpose made steel casement windows in heavy duty 50x6mm Thick 'Z' & "T" steel frame and mullion sections respectively complete with patterned m.s burglar proofing grille, one coat lead oxide primer, standard pressed metal permanent vent filled with non-corroding metal or plastic mosquito gauze to full width of sash, including cutting and pinning fixing lugs to walling and bedding in waterproof cement mortar (1:4) and pointing in approved mastic externally to the following window openings. Windows complete with and including brass stays and fasteners as described in:-				
C	Window opening overall size 2100x750mm high - C(31)02	No	8		
	GLAZING				
	8mm Thick frosted glass and glazing to metal windows				
D	In panes not exceeding 0.05 square metres	m2	13		
	Totals carried to Ablution blocks collection page.				

No	Description	Unit	Qnty	Rate	Amount
	6.4 FINISHES				
	PAINTING AND DECORATION				
	Touch up primer prepare and apply three coats gloss oil paint as supplied by CROWN BERGER LTD. (or equivalent) on:-				
A	General metal surfaces	m2	25		
	WALL FINISHES				
	EXTERNAL WALL FINISHES				
	10mm Deep half round neat horizontal joints (key pointing) in cement and sand mortar (1:3) as described on:-				
B	Stone wall surfaces	m2	111		
	15mm Thick cement and sand (1:3) render/backing, finished with wood float to:-				
C	Concrete column and beam surfaces to receive brick cladding (m.s)	m2	33		
	230x75x20mm Thick scratched facing bricks on cement and sand 1:3 backing (m.s), including chicken wire nailed to wall, pointed with neat recessed horizontal joints in coloured mortar to match as described on:-				
D	Rendered concrete surfaces	m2	33		
	Totals carried to Ablution blocks collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Precast concrete class 20 (12mm, aggregate - including formwork, finishing fair face on all exposed surfaces) decorative coping/capping/arch with 10mm diameter drip on both sides, secretly fixed with and including galvanised mild steel epoxy resin mortered dowel bars and jointed in cement and sand 1:3 mortar as described on:-				
A	425x375x75mm Thick twice weathered and throated capping on top of columns	No	4		
	INTERNAL WALL FINISHES				
	Cement and sand (1:4) backings				
B	15mm Thick to receive ceramic wall tiles (m.s)	m2	187		
	12mm (minimum) Two-coat lime plaster as described to:-				
C	Stone wall surfaces	m2	253		
	Surface preparation by skim coating				
D	Prepare and apply premixed joint compound from approved manufacturer to plastered wall and fair faced concrete surfaces to receive paint (m.s)	m2	200		
	Prepare and apply one undercoat and two finishing coats of first quality silk vinyl paint as supplied by CROWN BERGER LTD. (or equivalent) on:-				
E	Prepared wall and concrete surfaces	m2	200		
	300x300x6mm Thick Biege glazed ceramic wall tiles laid to approved pattern on cement and sand backing with cement slurry, waterproofed grout and pointing to match				
F	Walls	m2	187		
G	Extra over 300x200mm solid grey dado wall tiles to approval	m	96		
	Totals carried to Ablution blocks collection page.				

No	Description	Unit	Qnty	Rate	Amount
	FLOOR FINISHES				
	INTERNAL ROOMS & STORE FINISHES				
	Cement and sand (1:3) screeds, backings, beds etc				
A	32mm Thick screed finished to receive porcelain floor tiles	m2	75		
	600x600x10mm Thick non-slip porcelain floor tiles laid to approved pattern, bedded and pointed in matching cement slurry and waterproofed grout as described on:-				
B	Floors	m2	75		
C	100mm Skirting	m	12		
	CEILING FINISHES				
	PLASTERING & PAINTING				
	12mm (minimum) Two-coat lime plaster as described on:-				
D	Horizontal soffits of roof slabs Surface preparation by skim coating	m2	75		
E	Prepare and apply premixed joint compound from approved manufacturer to plastered ceiling surfaces to receive paint (m.s)	m2	75		
	Prepare and apply one undercoat and two finishing coats of first quality silk vinyl paint as supplied by CROWN BERGER LTD. (or equivalent) on:-				
F	Soffits of plastered surfaces	m2	75		
	Totals carried to Ablution blocks collection page.				

No	Description	Unit	Qnty	Rate	Amount
	6.5 FIXTURES				
	VANITY TOPS (PROVISIONAL)				
	Reinforced insitu concrete class 20 in:-				
A	65mm Thick top with and including A 193 mild steel fabric mesh	m2	4		
B	Ditto fascia to profile	m2	1		
	Sawn formwork to:-				
C	Edge of suspended slab not exceeding 100mm high	m	7		
D	Soffits of suspended slab including boxing around vanity wash hand basin opening	m2	4		
	Insitu cement and sand (1:3) screeded beds, with steel trowelled finish , on concrete				
E	15mm Thick to receive granite and marble finishes (m.s)	m2	4		
	20mm Thick granite finish laid to approved pattern, bedded, zero-jointed and pointed in matching cement slurry and waterproofed grout as described on:-				
F	Vanity tops	m2	4		
G	100mm High wall skirting/dado	m	7		
H	200mm High fascia to profile	m	7		
J	Extra over labour for cutting marble top to form holes for vanity wash hand basins	No	8		
	Totals carried to Ablution blocks collection page.				

No	Description	Unit	Qnty	Rate	Amount
	6.6 BUILDERS WORK IN CONNECTION WITH SERVICES				
	Builder's Work incidental to sanitary fittings, internal plumbing and drainage, reticulation, electrical, TV, data and telephone installations, concealed fixings etc.				
A	Allow for making holes, chasing walls, floors, inclusion of sleeves and other items necessary for the proper carrying out of the installations incuding all builder's work of making good all surfaces	Item	1	**100,000**	**100,000**
	6.7 FOOTPATH TO THE ABLUTION BLOCK				
	(ALL PROVISIONAL)				
	Excavations including maintaining and supporting sides and keeping free from water, mud and fallen material				
B	Excavate averagely 200mm deep to remove vegetable top soil and deposit in heaps on site as directed	m2	50		
C	Excavate to reduce levels not exceeding 1.5m deep starting from stripped level	m3	25		
	Disposal				
D	Cart away surplus excavated materials as directed on site	m3	35		
	Subgrade/Formation Level				
E	Roll and compact subgrade to achieve 98% modified proctors MDD including grading to falls and crossfalls	m2	50		
	Totals carried to Ablution blocks collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Sub-base and surface treatment				
A	300mm Thick gravel/murram compacted sub-base (GCS) laid at 2.5% crossfall, well watered and compacted to 98% MDD at optimum moisture content in two layers each at 150mm Thick in roads to Engineer's approval	m2	50		
B	200mm Thick handpacked hardcore well compacted to Engineer's approval	m2	50		
C	Prepare and apply total persistent herbicide to surfaces of sub-base	m2	50		
D	100mm Thick well compacted gravel finish on well compacted sub-base to Engineer's approval	m2	50		
	Precast concrete class 25/12 including all necessary formwork, finishing fair on all exposed surfaces and jointing and pointing in cement and sand (1:3) mortar:-				
E	250x125mm splayed kerb laid on and including 335x100mm concrete (1:3:6) bed and 200x100mm haunching behind	m	25		
	Totals carried to Ablution blocks collection page.				

No	Description	Unit			Amount
	COLLECTION SUMMARY FOR ABLUTION BLOCKS				
	Carried From page		45		
	page		46		
	page		47		
	page		48		
	page		49		
	page		50		
	page		51		
	page		52		
	page		53		
	page		54		
	page		55		
	Sub-total				
	TOTAL FOR ABLUTION BLOCKS X (2NO.) CARRIED TO GRAND SUMMARY				

No	Description	Unit	Qnty	Rate	Amount
	GATE HOUSES (3 NO.)				
	7.1 SUBSTRUCTURES (ALL PROVISIONAL)				
	TOP SOIL EXCAVATION				
A	Excavating oversite starting from existing level average 200mm deep to remove vegetable top soil and cart away	m2	13		
B	Mass excavation to reduce levels not exceeding 1.50m deep starting from stripped level	m3	7		
	EXCAVATION AND EARTHWORK				
C	Mass excavation to receive bases and foundation strips between 0.00 - 1.50m deep starting from stripped level	m3	18		
D	Extra over excavation for excavating in any class of rock in any position	m3	3		
E	Trimming, levelling and ramming surfaces of excavations to receive concrete work (m.s)	m2	12		
	SUNDRIES				
	Sundries				
F	Allow for keeping excavations free of water and mud by pumping, bailing or other approved means	Item	1		
G	Ditto maintaining and supporting sides of excavations keeping the same free from fallen materials	Item	1		
	DISPOSAL AND BACKFILLING				
	Return in, fill and ram selected excavated materials in layers not exceeding 150 mm Thick				
H	Around foundations	m3	51		
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Disposal				
A	Cart away surplus excavated materials as directed on site	m3	18		
	FILLING MATERIALS				
	Approved filling material				
B	Use selected excavated gravel/murrram or approved imported fill material well watered and compacted in layers not exceeding 150mm Thick to raise levels	m3	8		
C	Provide and lay 450mm thick hardcore filling well hand-packed, compacted and rolled in 3 layers not exceeding 150 mm thick	m2	11		
D	Ditto 50mm Thick quarry dust blinding watered and well rammed to receive concrete slab and pavers (m.s)	m2	11		
	INSECTICIDE TREATMENT				
E	Treat surface of hardcore with "Gladiator TC", Termidor or other equal and approved anti-termite insecticide applied strictly in accordance with manufactures printed instructions including providing a 5 years guarantee period.	m2	11		
	DAMP PROOF MEMBRANE				
F	1000 gauge polythene (or equivalent) damp proof membrane laid under surface bed with 300mm side and end laps (measured nett- allow for laps)	m2	11		
	CONCRETE WORK				
	Plain concrete (1:4:8) as described in:				
G	50mm Thick blinding to receive strip foundations	m2	6		
H	Ditto bases	m2	6		
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Vibrated and reinforced insitu concrete class 20 in:-				
A	Foundations in trenches, cast against faces of excavations	m3	1		
B	Bases	m3	2		
C	Columns	m3	0		
D	150mm Thick ground floor slab	m2	11		
	REINFORCEMENT				
	Reinfocement Bars; Round; Ribbed; cold worked; B.S. 4461 including bends, hooks tying wire, distance blocks and spacers;				
	Deformed Bars				
E	8mm Diameter bars	kg	35		
F	110mm Ditto	kg	59		
G	12mm Ditto	kg	158		
H	Fabric Mesh Reinforcement to BS 4483 B.R.C mesh A. 142 to B.S. 4483 in concrete surface bed with 300mm side and end laps (measured nett - allow for laps)	m2	11		
	SAWN FORMWORK TO:-				
I	Sides of bases	m2	6		
J	Ditto columns	m2	4		
K	Ditto strip foundations	m2	4		
L	Edges of floor slab over 150mm but not exceeding 225mm high	m	13		
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
	FOUNDATION WALLING				
	Rough chisel dressed natural quarry stone, bedded and jointed in cement and sand motar 1:3 including 20 mm wide hoop iron reinforcement in alternate course as described in:-				
A	200mm Thick walling	m2	24		
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
	7.2 SUPERSTRUCTURE CONCRETE WORK				
	STRUCTURAL FRAME				
	COLUMNS				
	Vibrated and reinforced insitu concrete class 25 in:-				
A	Columns	m3	1		
	Reinfocement Bars; Round; Ribbed; cold worked; B.S. 4461 including bends, hooks tying wire, distance blocks and spacers;				
	Deformed Bars				
B	8mm Diameter bars	kg	19		
C	12mm Ditto	kg	36		
	Sawn formwork to:-				
D	Vertical sides of square columns	m2	8		
	BEAMS				
	Vibrated and reinforced insitu concrete class 25 in:-				
E	Ring beams	m3	1		
	Reinfocement Bars; Round; Ribbed; cold worked; B.S. 4461 including bends, hooks tying wire, distance blocks and spacers;				
	Deformed Bars				
F	8mm Diameter bars	kg	144		
G	12mm Ditto	kg	64		
	Sawn formwork to:-				
H	Sides and soffits of beams	m2	21		
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
	SUSPENDED SLAB				
	Vibrated and reinforced insitu concrete class 25 in:-				
A	150mm Thick roof slab	m2	11		
	Sawn formwork to:-				
B	Soffits of suspended slab	m2	11		
C	Edges of slab over 150mm but not exceeding 225mm high	m	13		
	Reinfocement Bars; Round; Ribbed; cold worked; B.S. 4461 including bends, hooks tying wire, distance blocks and spacers;				
	Deformed Bars				
D	8mm Diameter bars	kg	10		
E	10mm Ditto	kg	108		
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
	7.3 MASONRY WALLING				
	EXTERNAL WALLING Smooth dressed natural stone from approved quarry bedded and jointed in gauged mortar (1:3) with and including 20mm hoop iron reinforcement in other alternate course as described in:-				
A	200mm Thick external wall	m2	21		
B	Ditto parapet wall	m2	7		
C	Extra over stone walling for fine chisel dressing on one side	m2	27		
	Precast concrete class 20 (12mm, aggregate - including formwork, finishing fair face on all exposed surfaces) decorative coping/capping with 10mm diameter drip on both sides, secretly fixed with and including galvanised mild steel epoxy resin mortered dowel bars and jointed in cement and sand 1:3 mortar as described on:-				
D	300x75mm Thick twice weathered and throated coping on top of parapet walls	m	13		
	Hessian based bituminous felt damp poofing course laid on cement and sand (1:4) mortar				
E	200mm Wide	m	11		
	INTERNAL WALLING Medium dressed natural stone from approved quarry bedded and jointed in gauged mortar (1:3) with and including 20mm hoop iron reinforcement in other alternate course as described in:-				
F	200mm Thick wall	m2	6		
G	Extra over stone walling for medium chisel dressing on both sides	m2	13		
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Pre-cast concrete class 20 (12mm aggregate) including formwork, flushing fair on all exposed surfaces, and hoisting and placing in position, bedding, jointing and pointing in cement and sand (1:3) mortar				
A	200 x 150mm Lintol reinforced with and including two 12mm diameter mild steel rods hooked at ends Hessian based bituminous felt damp poofing course laid on cement and sand (1:4) mortar	m	3		
B	200mm Wide	m	3		
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
	7.4 ROOFING				
	CONCRETE ROOF SLAB FINISHES				
	WATERPROOFING				
	Surface Preparation				
A	Hack-off concrete surfaces to expose the aggregates, clean the dust to receive waterproofing material (m.s)	m2	11		
	Prepare and apply "Coprox" or equal and approved waterproofing material in accordance with manufacturer's printed instructions and specifications with a ten year guarantee as described on:-				
B	Roof terrace surfaces to approved falls	m2	11		
C	150mm High skirting	m	13		
D	Extra over waterproofing for sealing coprox material or equal and approved to rainwater out/inlet (m.s).	No	2		
	A letter of guarantee shall be required for the waterproofing				
	12mm Thick cement and sand (1:3) screed laid to falls on:-				
E	Roof terraces	m2	11		
	ROOF DRAINAGE				
	Rain water goods				
F	75mm diameter UPVC down pipe encased into concrete columns (m.s)	m	6		
G	Ditto down pipe shoe	No	2		
H	75mm diameter aluminium fulbora inlet to rain water downpipes	No	2		
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
	7.5 DOORS				
	TIMBER DOORS				
	Wrot prime grade mahogany or other equal and approved hardwood with maximum moisture content 12%, well seasoned and pressure impregnated with approved preservative as fabricated by "Woodmakers (Kenya) Ltd" (or equivalent) as described in:-				
A	Beadings	m	4		
B	25x25mm Quadrant	m	11		
C	50x20mm Architrave	m	23		
D	150x50mm Thick frame fixed to wall with and including 250mm girth x 25 x 1.6mm galvanised mild steel cramps fixed at maximum 600mm centres on each jamb	m	11		
E	Ditto transome with four labours	m	1		
	45mm Thick semi solid flush door faced both sides with 6mm Thick mahogany veneer plywood and 4mm Thick hardwood lipping all round as described in:-				
F	Single leaf/single swing door overall size 650x2000mm high - C(32)03	No	1		
G	Ditto 900x2100 mm high - C(32)04	No	1		
	FANLIGHT 8mm Thick clear glass fanlight fixed to timber with glazing beads (m.s) as described:-				
H	In panes not exceeding 0.50 square meters	m2	1		
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
	IRONMONGERY				
	Supply and fix the following approved quality ironmongery as supplied by "UNION" (or equivalent) with matching screws :-				
A	100x2mm Thick stainless steel hinges complete with matching screws	Pairs	3		
B	3-Lever dead lock system complete with and including 19mm tubular stainless steel handles to approval	No	1		
C	Medium duty door closer to approval	No	1		
D	Stainless steel indicator bolt	No	1		
E	Ditto coat hook	No	1		
F	Door signage to approval	No	2		
G	900x150x2.0mm Thick stainless steel kick/crush plate on both sides of timber doors to approval	No	2		
H	Rubber door stop rawl bolted to concrete floor	No	2		
	PAINTING AND DECORATION				
	Prepare and apply one coat aluminium wood primer to back of frames before fixing to:-				
I	Timber surfaces between 100-200 mm girth	m	12		
J	Ditto 0-100 mm girth	m	23		
	Prepare, knot, prime, stop and apply two undercoats and one finishing coat of polyurethane varnish as supplied by CROWN BERGER LTD. (or equivalent) to wood work as dedecribed:-				
K	General timber surfaces	m2	9		
L	Timber surfaces between 100-200 mm girth	m	12		
M	Ditto 0-100mm girth	m	23		
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
	7.6 WINDOWS				
	WINDOW CILL				
	Precast concrete class 20 fair faced in all exposed surfaces bedded and jointed cement and sand (1:3) mortar as desscribed in:-				
A	250x75mm Thick cill with 10mm drip, secretly fixed to wall jambs at the bottom with and including 35x3mm mild steel weather bar	m	4		
B	Cut and pin ends of window cills	No	4		
	CASEMENT WINDOWS				
	Supply, assemble and fix the following purpose made steel casement windows in heavy duty 50x6mm Thick 'Z' & "T" steel frame and mullion sections respectively complete with patterned m.s burglar proofing grille, one coat lead oxide primer, standard pressed metal permanent vent filled with non-corroding metal or plastic mosquito gauze to full width of sash, including cutting and pinning fixing lugs to walling and bedding in waterproof cement mortar (1:4) and pointing in approved mastic externally to the following window openings. Windows complete with and including brass stays and fasteners as described in:-				
C	Window opening overall size 2100x750mm high - C(31)02	No	1		
D	Ditto 1200x750mm high	No	1		
	8mm Thick clear sheet glass and glazing to metal windows				
E	In panes not exceeding 0.10 square metres	m2	1		
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
	GLAZING				
	8mm Thick frosted glass and glazing to metal windows				
A	In panes not exceeding 0.05 square metres	m2	2		
	PAINTING AND DECORATION				
	Touch up primer prepare and apply three coats gloss oil paint as supplied by CROWN BERGER LTD. (or equivalent) on:-				
B	General metal surfaces	m2	5		
	7.7 FINISHES				
	WALL FINISHES EXTERNAL WALL FINISHES				
	10mm Deep half round neat horizontal joints (key pointing) in cement and sand mortar (1:3) as described on:-				
C	Stone wall surfaces	m2	27		
	15mm Thick cement and sand (1:3) render/backing, finished with wood float to:-				
D	Concrete column and beam surfaces to receive brick cladding (m.s)	m2	16		
	230x75x20mm Thick scratched facing bricks on cement and sand 1:3 backing (m.s), including chicken wire nailed to wall, pointed with neat recessed horizontal joints in coloured mortar to match as described on:-				
E	Rendered concrete surfaces	m2	16		
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Precast concrete class 20 (12mm, aggregate - including formwork, finishing fair face on all exposed surfaces) decorative coping/capping/arch with 10mm diameter drip on both sides, secretly fixed with and including galvanised mild steel epoxy resin mortered dowel bars and jointed in cement and sand 1:3 mortar as described on:-				
A	425x375x75mm Thick twice weathered and throated capping on top of columns	No	4		
	INTERNAL WALL FINISHES				
	Cement and sand (1:4) backings				
B	15mm Thick to receive ceramic wall tiles (m.s)	m2	13		
	12mm (minimum) Two-coat lime plaster as described to:-				
C	Stone wall surfaces	m2	119		
	Surface preparation by skim coating				
D	Prepare and apply premixed joint compound from approved manufacturer to plastered wall and fair faced concrete surfaces to receive paint (m.s)	m2	48		
	Prepare and apply one undercoat and two finishing coats of first quality silk vinyl paint as supplied by CROWN BERGER LTD. (or equivalent) on:-				
E	Prepared wall and concrete surfaces	m2	48		
	300x300x6mm Thick Biege glazed ceramic wall tiles laid to approved pattern on cement and sand backing with cement slurry, waterproofed grout and pointing to match				
F	Walls	m2	13		
G	Extra over 300x200mm solid grey dado wall tiles to approval	m	6		
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
	FLOOR FINISHES				
	INTERNAL ROOMS & STORE FINISHES				
	Cement and sand (1:3) screeds, backings, beds etc				
A	32mm Thick screed finished to receive porcelain floor tiles	m2	8		
	600x600x10mm Thick non-slip porcelain floor tiles laid to approved pattern, bedded and pointed in matching cement slurry and waterproofed grout as described on:-				
B	Floors	m2	8		
C	100mm Skirting	m	9		
	CEILING FINISHES				
	PLASTERING & PAINTING				
	12mm (minimum) Two-coat lime plaster as described on:-				
D	Horizontal soffits of roof slabs Surface preparation by skim coating	m2	8		
E	Prepare and apply premixed joint compound from approved manufacturer to plastered ceiling surfaces to receive paint (m.s)	m2	8		
	Prepare and apply one undercoat and two finishing coats of first quality silk vinyl paint as supplied by CROWN BERGER LTD. (or equivalent) on:-				
F	Soffits of plastered surfaces	m2	8		
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
					-
	7.8 BUILDERS WORK IN CONNECTION WITH SERVICES				
	Builder's Work incidental to sanitary fittings, internal plumbing and drainage, reticulation, electrical, TV, data and telephone installations, concealed fixings etc.				
A	Allow for making holes, chasing walls, floors, inclusion of sleeves and other items necessary for the proper carrying out of the installations incuding all builder's work of making good all surfaces	Item	1	**100,000**	**100,000**
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
	7.9 FOOTPATH				
	(ALL PROVISIONAL)				
	Excavations including maintaining and supporting sides and keeping free from water, mud and fallen material				
A	Excavate averagely 200mm deep to remove vegetable top soil and deposit in heaps on site as directed	m2	24		
B	Excavate to reduce levels not exceeding 1.5m deep starting from stripped level	m3	12		
	Disposal				
C	Cart away surplus excavated materials as directed on site	m3	17		
	Subgrade/Formation Level				
D	Roll and compact subgrade to achieve 98% modified proctors MDD including grading to falls and crossfalls	m2	24		
	Totals carried to Gate houses collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Sub-base and surface treatment				
A	300mm Thick gravel/murram compacted sub-base (GCS) laid at 2.5% crossfall, well watered and compacted to 98% MDD at optimum moisture content in two layers each at 150mm Thick in roads to Engineer's approval	m2	24		
B	200mm Thick handpacked hardcore well compacted to Engineer's approval	m2	24		
C	Prepare and apply total persistent herbicide to surfaces of sub-base	m2	24		
D	100mm Thick well compacted gravel finish on well compacted sub-base to Engineer's approval	m2	24		
	600x600x50mm Thick precast concrete paving slab laid with 5mm wide joint on and including 50mm thick quarry dust bed (m.s) pointed in matching cement and sand mortar with neat V-joints as described on:-				
E	Footpaths	m2	24		
	Precast concrete class 25/12 including all necessary formwork, finishing fair on all exposed surfaces and jointing and pointing in cement and sand (1:3) mortar:-				
F	250x125mm splayed kerb laid on and including 335x100mm concrete (1:3:6) bed and 200x100mm haunching behind	m	20		
	Totals carried to Gate houses collection page.				

No	Description	Unit			Amount
	COLLECTION SUMMARY FOR GATE HOUSES				
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	page		74		
	Sub-total				-
	TOTAL FOR GATE HOUSESS X (3NO.) CARRIED TO GRAND SUMMARY				-

No	Description	Unit	Qnty	Rate	Amount
	MAIN ARENA				
	8.1 PREPARATORY EARTH WORKS **(PROVISIONAL)**				
	FOOTBALL PITCH				
A	Prepare and apply selective weed killer - herbicide to surfaces of sub-base	m2	7,140		
	A letter of guarantee for ten (10) yeras shall be required for the weed contol treatment				
	"D" SECTIONS EXCAVATION & EARTHWORK				
B	Prepare and apply selective weed killer - herbicide to surfaces of sub-base	m2	2,148		
	A letter of guarantee for ten (10) yeras shall be required for the weed contol treatment				
	PITCH SURROUND				
C	Prepare and apply selective weed killer - herbicide to surfaces of sub-base	m2	1,526		
	A letter of guarantee for ten (10) yeras shall be required for the weed contol treatment				
	BALLAST SURROUND				
D	Prepare and apply selective weed killer - herbicide to surfaces of sub-base	m2	1,865		
	Totals carried to Main arena collection page.				

No	Description	Unit	Qnty	Rate	Amount
	A letter of guarantee for ten (10) yeras shall be required for the weed contol treatment				
	ATHLETIC RUNNING TRACK				
	SUB-BASE				
A	150mm Thick murram sub-base cement improved by 2% layer class S5 CBR 30% or more well watered and compacted to 98% MDD at optimum moisture content to Engineer's approval	m2	4,475		
B	Prepare and apply total persistent herbicide to surfaces of sub-base	m2	4,475		
	A letter of guarantee for ten (10) yeras shall be required for the weed contol treatment				
	Precast concrete class 25/12 including all necessary formwork, finishing fair on all exposed surfaces and jointing and pointing in cement and sand (1:3) mortar:-				
C	250x125mm splayed kerb laid on and including 225x150mm concrete (1:3:6) bed and 200x150mm haunching behind	m	31		
D	Take from storage kerb only and fix ditto	m	594		
	Totals carried to Main arena collection page.				

No	Description	Unit	Qnty	Rate	Amount
	8.2 FOOTBALL PITCH (LAWN)				
	PLANTING MATERIALS				
A	100mm Thick well spread fine river sand layer on well compacted sub-base (m.s) to Engineer's approval	m2	7,140		
B	150mm Thick amended top soil media to be ploughed, disked, graded and chain harrowed for a smooth surface with even falls and a fine tilth for seeding mixed in the ratio Redsoil: Sand: Manure (2:1:1) to Engineer's/Architect's approval	m2	7,140		
	Insecticide Treatment				
C	Treat surface of hardcore with "Gladiator TC", Termidor or other equal and approved anti-termite insecticide applied strictly in accordance with manufactures printed instructions including providing a 5 years guarantee period.	m2	7,140		
	FINISHES				
	Natural finish				
D	Supply and plant natural lawn - Kikuyu/Paspallan or approved equivalent grass finish well watered and maintained for a period of 12 months after planting to Architect's and Client's approval	m2	7,140		
	FRENCH DRAIN				
	Excavation in hard surface				
E	Excavation in compacted fill not exceeding 1m deep for drain trenches/channels to receive slits (m.s)	m3	287		
	Totals carried to Main arena collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Drain pipe				
A	100mm Diameter pre-perforated pipe set at 600mm deep sloping at 1 degrees to collection drains at 7000mm centres wrapped with geotextile fabric (m.s) and filled with course sand on gravel backfill (m.s) to Engineer's approval	m	1,020		
B	Supply and wrap Biddim geotextile fabric category A3 as supplied by Keytech Engineered Fabrics or equivalent around the french drains pipes to Engineer's approval	m2	801		
	Fillings				
C	300x100mm Deep fine river sand on and including 300x350mm deep ballast fill (minimum aggregate size 20mm) in channels at 7000mm centres to Engineer's approval	m	1,020		
	SLITS				
	Excavation in hard surface				
D	Excavation in compacted fill not exceeding 1m deep for channels to receive slits (m.s)	m3	224		
	Fillings				
E	150x100mm Deep fine river sand layer on and including 150x150mm Deep ballast fill (minimum aggregate size 20mm) in slits at 1200mm centres to Engineer's approval	m	5,985		
	Totals carried to Main arena collection page.				

No	Description	Unit	Qnty	Rate	Amount
	8.3 PITCH SURROUND (LAWN & BALLAST)				
	PLANTING MATERIALS				
A	100mm Thick well spread fine river sand layer on well compacted sub-base (m.s) to Engineer's approval	m2	1,526		
B	150mm Thick amended top soil media to be ploughed, disked, graded and chain harrowed for a smooth surface with even falls and a fine tilth for seeding mixed in the ratio Redsoil: Sand: Manure (2:1:1) to Engineer's/Architect's approval	m2	1,526		
	Insecticide Treatment				
C	Treat surface of hardcore with "Gladiator TC", Termidor or other equal and approved anti-termite insecticide applied strictly in accordance with manufactures printed instructions including providing a 5 years guarantee period.	m2	1,526		
	FINISHES				
	Natural finish				
D	Supply and plant natural lawn - Kikuyu/Paspallan or approved equivalent grass finish well watered and maintained for a period of 12 months after planting to Architect's and Client's approval	m2	1,526		
	BALLAST SURROUND				
E	200mm Thick well compacted aggregate on well compacted sub-base to Engineer's approval	m2	1,865		
	Totals carried to Main arena collection page.				

No	Description	Unit	Qnty	Rate	Amount
	8.4 D-SECTIONS (LAWN)				
	PLANTING MATERIALS				
A	100mm Thick well spread fine river sand layer on well compacted sub-base (m.s) to Engineer's approval	m2	2,148		
B	150mm Thick amended top soil media to be ploughed, disked, graded and chain harrowed for a smooth surface with even falls and a fine tilth for seeding mixed in the ratio Redsoil: Sand: Manure (2:1:1) to Engineer's/Architect's approval	m2	2,148		
	Insecticide Treatment				
C	Treat surface of hardcore with "Gladiator TC", Termidor or other equal and approved anti-termite insecticide applied strictly in accordance with manufactures printed instructions including providing a 5 years guarantee period.	m2	2,148		
	FINISHES				
	Natural finish				
D	Supply and plant natural lawn - Kikuyu/Paspallan or approved equivalent grass finish well watered and maintained for a period of 12 months after planting to Architect's and Client's approval	m2	2,148		
	Totals carried to Main arena collection page.				

No	Description	Unit	Qnty	Rate	Amount
	8.5 RUNNING TRACK (TARTAN PREPARATORY WORK)				
	REINFORCED CONCRETE WORK				
	Vibrated and reinforced insitu concrete class 25 to B.S. 8110 in:-				
A	100mm Thick slab to receive tartan finish (m.s)	m2	4,475		
B	Extra over concrete power floating or equivalent finish to Engineer's approval	m2	4,475		
	FORMWORK				
	Wrot formwork to:-				
C	Edges of concrete slab over 75mm but not exceeding 150mm high	m	1,002		
	REINFORCEMENT				
	Fabric Mesh Reinforcement to BS 4483				
D	Double layer B.R.C mesh A. 142 to B.S. 4483 in concrete surface bed with 300mm side and end laps (measured nett - allow for laps)	m2	8,950		
	CONSTRUCTION AND EXPANSION JOINTS				
	Saw cut joints				
E	25mm saw cut contraction joint to Engineer's approval	m	1,150		
F	25x10mm bituminous sealant to approval	m	1,150		
	Expansion Joint				
G	150x25mm Thick "Flexcell Expandite" Resin borded cork joint filler or equivalent to Engineer's approval	m	805		
H	25x10mm bituminous sealant to Engineer's approval	m	805		
	Totals carried to Main arena collection page.				

No	Description	Unit	Qnty	Rate	Amount
	8.6 STEEPLECHASE PIT				
	Excavations and earthworks				
A	Excavation in compacted murram sub-base not exceeding 1.50m deep for steeplechase pit and cart away	m3	20		
B	Roll and compact to achieve 98% modified proctors MDD to acceptable slope	m2	19		
C	Provide, lay, roll and compact 150mm Thick handpacked hardcore to Engineer's approval	m2	19		
D	50mm Thick quarry dust blinding on compacted hardcore surfaces to receive concrete infill/bed (m.s)	m2	19		
	Fabric Mesh Reinforcement to BS 4483				
E	B.R.C mesh A. 142 to B.S. 4483 in concrete bed with 300mm side and end laps (measured nett - allow for laps)	m2	19		
	High tensile ribbed steel reinforcement to B.S. 4449 including cutting, bending, hoisting, fixing, binding wire and spacer blocks as described in:-				
F	8mm Diameter bars	kg	94		
	Sawn formwork to:-				
G	Sides of upstand/side walls	m2	13		
	Vibrated and reinforced insitu concrete class 20 in:-				
H	100mm Thick base slab	m2	19		
J	150mm Thick upstand/side walls	m2	7		
K	Deep end infill	m3	2		
	Totals carried to Main arena collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Waterproofing				
	"XYPEX" or approved equivalent waterproofing material applied strictly in accordance with printed manufacturer's instructions as described on:-				
A	Upstand wall surfaces	m2	10		
B	Floor bed	m2	19		
	Totals carried to Main arena collection page.				

No	Description	Unit	Qnty	Rate	Amount
	8.7 LONG AND TRIPPLE JUMP				
	EXCAVATION AND EARTHWORK				
A	Excavating oversite starting from existing ground level average 200mm deep to remove vegetable top soil	m2	172		
B	Mass excavation to reduce levels not exceeding 1.50m deep starting from stripped level	m3	69		
	Disposal of excavated materials				
C	Cart away surplus excavated materials as directed on site	m3	103		
	Sub-base				
D	200mm Thick sub-grade formation layer processed/scarified and compacted to achieve 98% MDD to Engineer's approval	m2	149		
E	Prepare and apply selective weed killer - herbicide to surfaces of sub-base RUNWAY/TAKE-OFF AREA	m2	149		
	Sub-base				
F	200mm Thick murram sub-base class S5 cement improved by 2% well watered and compacted to 98% MDD at optimum moisture content in layers not exceeding 100mm Thick to Engineer's approval	m2	94		
G	Prepare and apply selective weed killer - herbicide to surfaces of sub-base	m2	94		
	A letter of guarantee for ten (10) yeras shall be required for the weed contol treatment				
	Totals carried to Main arena collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Tartan preparatory works				
A	Prepare and spray paint Prime Coat MC30 and Track Coat K170 on prepared surfaces to receive asphalt concrete (m.s)	m2	94		
B	50mm thick asphalt concrete layer Type II (0/14) on murram base to receive 3.5mm thick tartan finish by specialist (m.s)	m2	94		
	Precast concrete class 25/12 including all necessary formwork, finishing fair on all exposed surfaces and jointing and pointing in cement and sand (1:3) mortar:-				
C	125x100mm channel block, laid on 10mm Thick mortar with 150mm wide openings at every 10m interval and including class 15/20 425x150mm concrete bed and haunching	m	15		
	Take from storage and fix ditto	m	130		
	LANDING AREA				
	French drain pipe				
D	100mm Diameter pre-perforated pipe set at 600mm deep sloping at 1 degrees to collection drains at 7000mm centres wrapped with geotextile fabric (m.s) and filled with course sand on gravel backfill (m.s) to Engineer's approval	m	74		
E	Supply and wrap Biddim geotextile fabric category A3 as supplied by Keytech Engineered Fabrics or equivalent around the french drains pipes to Engineer's approval	m2	35		
F	Ditto membrane on ballast base (m.s)	m2	56		
	Filling materials				
G	200mm Thick ballast base (minimum aggregate size 20mm) to Engineer's approval	m2	56		
	Totals carried to Main arena collection page.				

No	Description	Unit	Qnty	Rate	Amount
A	300mm Thick fine river sand on ballast base to Engineer's approval	m2	56		
	Precast concrete class 25/12 including all necessary formwork, finishing fair on all exposed surfaces and jointing and pointing in cement and sand (1:3) mortar:-				
B	125x100mm channel block, laid on 10mm Thick mortar with 150mm wide openings at every 10m interval and including class 15/20 275x150mm concrete bed and haunching	m	49		
	Totals carried to Main arena collection page.				

No	Description	Unit	Qnty	Rate	Amount
	8.8 STORMWATER DRAINAGE SYSTEM AROUND THE PITCH				
	REINFORCED CONCRETE OPEN DRAIN CHANNEL				
	Precast concrete class 20 (12mm aggregates) including 8mm diameter tensile reinforcement bars (top & bottom) at 200mm centres, formwork, finishing fair on all exposed surfaces, and hoisting and placing in position as described in:-				
A	650mm wide x 100mm Thick in 1000mm removable sections. Take from storage the PCC Elements and install in position appropriately to approval.	m	350		
	Totals carried to Main arena collection page.				

No	Description	Unit			Amount
	COLLECTION SUMMARY FOR MAIN ARENA				
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	TOTAL FOR MAIN ARENA TO GRAND SUMMARY				

No	Description	Unit	Qnty	Rate	Amount
	CIVIL WORKS (PHASE 1A RELATED)				
	9.1 GENERAL SITE PREPARATORY WORKS (ALL PROVISIONAL)				
	SITE CLEARANCE				
	Clearing site vegetation, grubbing up roots and filling up voids left with selected excavated material;				
A	Bushes, shrubs, undergrowth or the like and cart away from site including cutting down trees not exceeding 900mm girth;	m2	10,031		
	CUT AND FILL				
B	Mass excavations not exceeding 1.50m deep to cut raised ground levels and set aside for re-use	m3	2,006		
C	Use selected excavated material or approved imported fill to raise up low ground levels under buildings/pitche/landscape areas deposited, spread, graded and compacted in layers not exceeding 150mm thick to Engineer's approval	m3	1,505		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	9.2 UNDERGROUND WATER TANK				
	Existing VR Concrete underground chamber				
	WATERPROOFING				
	Waterproofing with "Master Seal" (or equivalent) material applied strictly in accordance with manufacturer's printed instructions and specifications and with a Ten (10) year warranty period				
A	To tank base and cover slab surfaces before and after casting bases	m2	185		
B	To walls in two layers each at the rate of 0.75 per square metre	m2	188		
C	50 x 50 mm angle fillet dressing at joints	m	43		
D	Dressing to over flow and scour pipe outlets	No	1		
	Cement and sand (1:3) screed laid to falls and finished to receive waterproofing				
E	40mm Thick screed	m2	93		
F	20mm Thick render to wall surfaces (internally)	m2	188		
G	25mm Thick screed to cover slab surfaces	m2	93		
	Water bars				
H	150mm wide PVC bulb-edge strip or approved equivalent water bar, in concrete laid to manufacturers specifications;	m	-		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	METAL WORK				
	Grade B medium duty cast iron single cover and frame in:-				
A	600x600mm access cover complete with 6mm diameter bar standard lifting handles, bedded in cement and sand mortar to approval	No	1		
	Stainless steel grated cover and frame in:-				
B	600x600mm sump, bedded in cement and sand mortar to approval	No	1		
	Internal access ladder				
C	300x250mm step iron fully encapsulated in yellow polypropylene fixed to concrete wall at 150mm centres	No	10		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	9.3 BOUNDARY WALL				
	BOUNDARY WALL				
	BELOW THE GROUND (PROVISIONAL)				
	Excavation and earthwork				
A	Excavate starting from existing level, trenches to receive foundations not exceeding 1.50m deep and deposit in heaps on site as directed	m3	892		
B	Ditto bases; ditto	m3	822		
C	Extra over excavation for excavating in any class of rock in any position	m3	257		
D	Trimming, levelling and ramming surfaces of excavations to receive concrete work (m.s)	m2	1,319		
	Sundries				
E	Allow for keeping excavations free of water and mud by pumping, bailing or other approved means	Item	1		
F	Ditto maintaining and supporting sides of excavations keeping the same free from fallen materials	Item	1		
	Return in, fill and ram selected excavated materials in layers not exceeding 150 mm Thick				
G	Around foundations	m3	503		
	Disposal				
H	Cart away surplus excavated materials as directed on site	m3	423		
	Plain concrete (1:4:8) as described in:				
J	50mm Thick blinding to receive strips and bases	m2	1,319		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Vibrated and reinforced insitu concrete class 20 in:-				
A	Strip footings	m3	137		
B	Bases	m3	190		
C	Columns	m3	38		
D	Ground Beam	m3	81		
	High Tensile reinforcement bars to B.S. 4461 including cutting, bending, hoisting, fixing, binding wire and spacing blocks as described in:-				
E	8mm Diameter bars	kg	6,838		
F	10mm Ditto	kg	3,601		
G	12mm Ditto	kg	26,306		
H	16mm Ditto	kg	4,219		
	Sawn formwork to:-				
J	Sides of columns	m2	629		
K	Ditto ground beam	m2	813		
	Rough chisel dressed natural quarry stone, bedded and jointed in cement and sand motar 1:3 including 20 mm wide hoop iron reinforcement in alternate course as described in:-				
L	200mm Thick walling	m2	1,486		
	Expansion Joint				
M	25mm Thick "Flexcell Expandite" Resin borded cork filler or equivalent joint filler between columns	m2	11		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	ABOVE THE GROUND				
	Vibrated and reinforced insitu concrete class 20				
A	Columns	m3	87		
	Sawn formwork to:-				
B	Sides of columns	m2	1,441		
	High Tensile reinforcement bars to B.S. 4461 including cutting, bending, hoisting, fixing, binding wire and spacing blocks as described in:-				
C	8mm Diameter bars	kg	5,398		
D	12mm Ditto	kg	5,708		
	Medium chisel dressed natural quarry stone, bedded and jointed in cement and sand motar 1:3 including 20mm wide hoop iron reinforcement in alternate course as described in:-				
E	200mm Thick walling	m2	2,942		
	15mm cement and sand (1:3) render, finished with woodfloat to:-				
F	Column surfaces	m2	863		
	10mm Deep half round neat horizontal joints (key pointing) in cement and sand mortar (1:3) as described in:-				
G	Stone wall surfaces	m2	5,884		
	Expansion Joint				
H	25mm Thick "Flexcell Expandite" Resin borded cork filler or equivalent joint filler between columns	m2	26		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Precast concrete class 20 (12mm aggregates) including formwork, finishing fair on all exposed surfaces, and hoisting and placing in position , bedding , jointing and pointing in cement and sand (1:3) mortar				
A	300x50mm coping with 12x10mm deep drip throat on top of 200mm wall	m	1,279		
B	300x300x50mm caping with 12x10mm deep drip throat on top of columns	No	532		
	MAIN ENTRANCE/EXIT GATES				
	Mild Steel; primed before fixing and painted afterwards three coats gloss paint as directed.				
C	Vehicular bouble-leaf gate overall size 6000 x 2250mm high with top spikes at 100mm centres in two equal leaves; each comprising 100x100x4mm RHS framing, top and bottom railing; infilled with 50x35x4mm vertical members welded to rails at 100mm centres; each leaf hunged on RC gate posts (m.s) on three purpose made heavy duty hinges with brass bush set in and provided with 2No. 750 mm long drop barrel bolt and brass castor including spherical shaped 16 gauge mild steel sheet on both sides of each leaf for bearing the County's branded signage logo (m.s)	No	3		
D	Pedestrian gate overall 900x2250mm high but without mild steel sheet	No	6		
	Touch up primer prepare and apply three coats gloss oil paint as supplied by CROWN BERGER LTD. (or equivalent) on:-				
E	General metal surfaces	m2	116		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	9.4 PARKING AND DRIVEWAY				
	EXCAVATION AND EARTHWORKS				
	Excavations including maintaining and supporting sides and keeping free from water, mud and fallen material				
A	Excavate averagely 200mm deep to remove vegetable top soil and deposit in heaps on site as directed	m2	3,677		
B	Excavate to reduce levels not exceeding 1.5m deep starting from stripped level	m3	1,103		
	Disposal				
C	Cart away surplus excavated materials as directed on site	m3	1,838		
	Subgrade/Formation Level				
D	Roll and compact subgrade to achieve 98% modified proctors MDD including grading to falls and crossfalls	m2	3,677		
	Sub-base and surface treatment				
E	200mm Thick gravel/murram compacted sub-base (GCS) laid at a slope of 1:30, well watered and compacted to 98% MDD at optimum moisture content in two layers each at 100mm to Engineer's approval	m2	3,677		
F	300mm Thick hand-packed hardcore laid in two layers of 150mm Thick, well compacted to Engineer's approval	m2	3,677		
G	Prepare and apply total persistent herbicide to surfaces of sub-base	m2	3,677		
H	100mm Thick well compacted gravel finish laid at a slope of 1:30 on well compacted sub-base to Engineer's approval	m2	3,677		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	9.5 FOUL WATER DRAINAGE				
	DRAIN PIPES (PROVISIONAL)				
	Excavating trenches in any material including rock, starting at formation level, for drain pipes, service pipes and the like, not exceeding 300mm diameter, trimming bottom of excavations to regular falls, backfilling with selected excavated material, compacting as described and cart away surplus excavated materials as directed on site including earthwork support to sides of trenches for:-				
A	For 150mm diameter pipe average 1000mm deep	m	428		
B	Allow for keeping excavations free from all water, mud and the like by pumping, bailing or other means including the provision of all necessary pumps, temporary plumbing, etc.	Item	1		
C	Maintaining and upholding sides of excavations and keeping from all fallen materials, rubbish and other foreign matters	Item	1		
	Selected excavated gravel/murram material maximum size 6mm, laid to regular falls in trenches in 100mm thick bed and covering to top and sides of pipe to a thickness of 200mm above the top of the pipe for the width of the trench, to the following UPVC pipes				
D	200mm Diameter pipe	m	428		
	PVC Pipes				
E	200mm Diameter UPVC "Key Terrain" underground drainage system and laying and jointing in accordance with the manufacturer's instructions	m	428		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	MANHOLES (PROVISIONAL)				
A	Excavate for and provide all materials and construct standard manhole size (internal) 900 x 900 x 950mm depth (average) complete with medium duty cover and frame and pipe connections	No	5		
B	Ditto, size 900 x 900 x 1050mm depth (average) ditto	No	5		
C	Ditto, size 900 x 900 x 1100mm depth (average) ditto	No	10		
D	Manholes in precast concrete circular rings 1500mm diameter jointed in cement and sand (1:3) mortar including 150mm Thick concrete (1:3:6) base and necessary excavations at average depth 2900mm deep	No	10		
E	Extra over excavation for excavating in any class of rock in any position	m3	50		
	<u>Sundries (Provisional)</u>				
F	300mm Long twice bent 12 mm diameter mild steel steps including building into walls	No	100		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	SEPTIC TANK (PROVISIONAL)				
	EXCAVATIONS				
	BULK EXCAVATIONS				
A	Excavate averagely 200mm deep to remove vegetable top soil and deposit in heaps on site as directed	m2	126		
B	Excavate pit 0.00-1.50 m deep commencing from ground level	m3	188		
C	Ditto 1.50-3.00m deep; ditto	m3	187		
D	Ditto 3.00-4.50m deep; ditto	m3	187		
E	Ditto 4.50-6.00m deep; ditto	m3	12		
F	Extra over excavation for excavating in any class of rock in any position	m3	120		
G	Trimming, levelling and ramming surfaces of excavations to receive concrete work (m.s)	m2	125		
H	Return, fill and ram with selected excavated material	m3	71		
J	Cart away surplus excavated materials as directed on site	m3	486		
K	Allow for keeping the excavations free from water and mud by pumping bailing or by other approved means	Item	1		
L	Ditto maintaining and supporting sides of excavations and for keeping bottoms free from fallen materials	Item	1		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	UNREINFORCED CONCRETE				
	Plain concrete (1:4:8) as described in:				
A	50mm Thick surface blinding under strips and base slab	m2	126		
	REINFORCED CONCRETE				
	Vibrated and reinforced insitu concrete class 25 in:-				
B	200mm Thick base slab	m2	126		
C	150mm Thick cover slab	m2	107		
D	200mm Thick retaining wall	m2	237		
E	Ditto scam baffle wall	m2	17		
F	Beams	m3	2		
	Reinforcement Bars; Round; Ribbed; cold worked; B.S. 4461 including bends, hooks tying wire, distance blocks and spacers;				
	Deformed Bars				
G	8mm Diameter bars	kg	1,912		
H	10mm Ditto	kg	3,827		
J	12mm Ditto	kg	3,629		
K	16mm Ditto	kg	6,305		
L	25mm Ditto	kg	217		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Sawn formwork to:-				
A	Soffits of suspended slab	m2	107		
B	Ditto walls	m2	507		
C	Sides of bases	m2	20		
D	Sides and soffites of beams	m2	20		
E	Edges of suspended slab over 150mm but not exceeding 225mm high	m	46		
F	Boxing in formwork to form rebated opening size 600x450mm in 150mm Thick cover slab	No	2		
G	Extra over labour for forming wall opening for inlet and outlet pipes (m.s)	No	2		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	WATERPROOFING				
	Bituminous tanking as described in:-				
A	Base and cover slab surfaces	m2	213		
B	Wall surfaces	m2	470		
C	50 x 50 mm angle fillet dressing at joints	m	59		
D	Dressing to inlet and outlet pipes	No	2		
	Cement and sand (1:3) screed laid to falls and finished to receive waterproofing				
E	40mm Thick screed	m2	106		
F	20mm Thick render to wall surfaces (internally)	m2	470		
G	25mm Thick screed to cover slab surfaces	m2	106		
	Water bars				
H	150mm wide PVC bulb-edge strip or approved equivalent water bar, in concrete laid to manufacturers specifications;	m	141		
	METAL WORK Heavy duty cast iron single cover and frame in:-				
J	600x450mm manholes complete with 6mm diameter bar standard lifting handles, bedded in cement and sand mortar to approval	No	4		
	Internal access ladder				
K	300x250mm step iron fully encapsulated in yellow polypropylene fixed to concrete wall at 150mm centres	No	56		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	TESTING				
A	Allow for testing the whole of the foul drainage system during the progress and at completion of the works and leaving in sound and working order to the satisfaction of the Engineer	Item	1		
	SOAKPIT				
B	Soakpit overall size 1500mm diameter (externally) 6000mm deep consisting of 150mm thick masonry wall to a height of 1000mm with 100mm thick concrete 1:3:6 strip foundation and 150mm thick cover slab reinforced with T8 at 100mm c/c] slots for 100mm diameter UPVC inlet pipe and 450x600mm medium duty cast iron manhole cover and frame (m.s); infilled with 200mm maximum size stones up to depth of 4850mm (All necessary excavations in any class of rock in any position are inclusive and all disposal of excess stone or soil)	No	2		
C	600x450mm Medium duty cast iron manhole cover and frame including bedding frame in cement and sand mortar sand mortar 1:3 and setting cover in grease	No	2		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	9.6 STORMWATER DRAINAGE				
	SHALLOW INVERT BLOCK DRAIN				
	Excavation				
A	Excavate trenches in any material for IBD, depth not exceeding 1.50 metres average depth 750mm and cart away surplus material from site	m3	131		
B	Trimming, levelling and ramming surfaces of excavations to receive murram bed (m.s)	m2	175		
	Drain Channel				
C	Use selected excavated gravel/murrram or approved imported fill material to make up beds to Engineer's approval	m3	53		
D	Provide, lay and compact approved gravel/murram bedding 100mm Thick to Engineer's approval	m	292		
E	Provide, lay and joint with 1:3 mortar precast invert block drain size 600x450x200mm with and including two coarse precast side slope slabs size 75x225x600mm to approval	m	292		
	UNDERGROUND STORMWATER DRAINAGE				
	DRAIN PIPE				
	Excavation and earthwork				
F	Excavating trenches in any material, starting at formation level, for drain pipes not exceeding 450mm diameter, trimming bottom of excavations to regular falls, backfilling with selected excavated material and carting away surplus excavated materials as directed on site including earthwork support to sides of trenches	m3	227		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Selected excavated or imported granular material laid and compacted to 80%MDD in 100mm thick bed, 150mm Thick covering top and surrounds of the pipe for the entire trench width as described to the following UPVC pipes				
A	400mm Diameter pipe	m	284		
	Supply and fix the following UPVC pipes for water drainage as manufactured by Metro Plastics (K) Ltd (or equivalent).				
B	400mm Diameter pipe laid in trenches and jointed in accordance with the manufacturer's instructions	m	284		
	GULLY POT				
	Inspection Chamber internal size 450x450mm				
C	Excavate for, provide all materials and construct cast in-situ gully pot (internal) 450 x 450 x 950mm depth (average) complete with and including 150mm thick chisel dressed masonry wall (or equivalent), reinforced concrete class 20/20 in 150mm Thick bed and cover slab with BRC mesh A142 and 8mm Diameter reinforcement bars respectively, concrete class 15/20 blinding, inlet/outlet pipe bed and surround, formwork, 12mm thick render to internal surfaces, 365x405mm cast iron concrete filled gully grating bedded in 1:3 cement sand mortar to approval	No	62		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	9.7 CULVERTS AND HEADWALLS (3NO. ENTRANCES/EXITS)				
	(ALL PROVISIONAL)				
	CULVERTS				
	Excavations including maintaining and supporting sides and keeping free from water, mud and fallen material				
A	Excavate trenchin compacted filling material for ogee precast pipes 600mm diameter depth not exceeding 1.50 metres and set aside for re-use	m3	43		
	Vibrated and reinforced insitu concrete class20 in:-				
B	150mm Thick bed	m2	24		
C	Surround	m3	22		
	Reinforcement				
D	Fabric mesh ref:A193 in bed	m2	96		
	Sawn formwork to:-				
E	Sides/edges of bed and surround	m2	48		
	Culvert				
F	Provide and lay and joint 600mm diameter spigot and socket precast concrete pipes jointed with 1:3 mortar	m	24		
	Filling with imported fill				
G	Provide and lay approved sub-base in 200mm layers each well compacted and levelled to 95% Mod AASHTO density to Engineer's approval	m3	24		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	HEADWALLS				
	Excavations including maintaining and supporting sides and keeping free from water, mud and fallen material				
A	Excavate trench for ogee precast pipes diameter 600mm depth not exceeding 1.50 metres and cart away surplus material from site	m3	108		
B	Ditto not exceeding 3.0 metres ditto	m3	72		
	Disposal of excavated materials				
C	Load and cart away excavated material from site to a distance of 15km away	m3	180		
	Vibrated and reinforced insitu concrete class20/20 in:-				
D	250mm Thick Headwall	m2	5		
E	Ditto Apron	m2	26		
F	Ditto Toewall	m2	32		
	Sawn formwork to:-				
G	Sides of headwalls, apron and toewalls	m2	143		
	Reinforcement				
H	Assorted reinforcement bars	kg	1,594		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	9.8 ELEVATED WATER TANK - FOUNDATIONS				
	Excavations & Earthworks				
A	Mass excavation to receive bases between 0.00 - 1.50m deep starting from ground level	m3	35		
B	Ditto 1.50 - 3.00m ditto	m3	25		
C	Extra over excavation for excavating in any class of rock in any position	m3	12		
D	Trimming, levelling and ramming surfaces of excavations to receive concrete work (m.s)	m2	23		
	Sundries				
E	Allow for keeping excavations free of water and mud by pumping, bailing or other approved means	Item	1		
F	Ditto maintaining and supporting sides of excavations keeping the same free from fallen materials	Item	1		
	Return in, fill and ram selected excavated materials in layers not exceeding 150 mm Thick				
G	Around foundations	m3	30		
	Disposal				
H	Cart away surplus excavated materials as directed on site	m3	18		
	Plain concrete (1:4:8) as described in:				
J	50mm Thick blinding to receive strip foundations	m2	23		
	Vibrated and reinforced insitu concrete class 25 in:-				
K	Bases	m3	15		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
A	Stub columns	m3	2		
B	Ground beam	m3	1		
	Reinfocement Bars; Round; Ribbed; cold worked; B.S. 4461 including bends, hooks tying wire, distance blocks and spacers;				
	Deformed Bars				
C	10mm Diameter bars	kg	162		
D	16mm Ditto	kg	1,356		
E	20mm Ditto	kg	164		
	Sawn formwork to:-				
F	Sides of bases	m2	25		
G	Ditto columns	m2	14		
H	Sides and soffits of beams	m2	12		
	Metal Work				
J	700mm Long M20 G8.8 high density bolt plugged into concrete columns during casting to receive plate and mild steel columns (m.s) including necessary protection cover to exposed threaded surfaces	No	16		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	9.9 SUBSTRUCTURES (ALL PROVISIONAL)				
	SUBSTRUCTURES (ALL PROVISIONAL)				
	TOP SOIL EXCAVATION				
A	Excavating oversite starting from existing level average 200mm deep to remove vegetable top soil and cart away	m2	10		
B	Mass excavation to reduce levels not exceeding 1.50m deep starting from stripped level EXCAVATION AND EARTHWORK	m3	5		
C	Mass excavation to receive bases and foundation strips between 0.00 - 1.50m deep starting from stripped level	m3	10		
D	Extra over excavation for excavating in any class of rock in any position	m3	2		
E	Trimming, levelling and ramming surfaces of excavations to receive concrete work (m.s)	m2	7		
	SUNDRIES				
	Sundries				
F	Allow for keeping excavations free of water and mud by pumping, bailing or other approved means	Item	1		
G	Ditto maintaining and supporting sides of excavations keeping the same free from fallen materials	Item	1		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	DISPOSAL AND BACKFILLING				
	Return in, fill and ram selected excavated materials in layers not exceeding 150 mm Thick				
A	Around foundations	m3	7		
	Disposal				
B	Cart away surplus excavated materials as directed on site	m3	12		
	FILLING MATERIALS				
	Approved filling material				
C	Use selected excavated gravel/murrram or approved imported fill material well watered and compacted in layers not exceeding 150mm Thick to raise levels	m3	6		
D	Provide and lay 450mm thick hardcore filling well hand-packed, compacted and rolled in 3 layers not exceeding 150 mm thick	m2	8		
E	Ditto 50mm Thick quarry dust blinding watered and well rammed to receive concrete slab and pavers (m.s)	m2	8		
	INSECTICIDE TREATMENT				
F	Treat surface of hardcore with "Gladiator TC", Termidor or other equal and approved anti-termite insecticide applied strictly in accordance with manufactures printed instructions including providing a 5 years guarantee period.	m2	8		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	DAMP PROOF MEMBRANE				
A	1000 gauge polythene (or equivalent) damp proof membrane laid under surface bed with 300mm side and end laps (measured nett- allow for laps)	m2	8		
	CONCRETE WORK				
	Plain concrete (1:4:8) as described in:				
B	50mm Thick blinding to receive strip foundations	m2	7		
	Vibrated and reinforced insitu concrete class 20 in:-				
C	Foundations in trenches, cast against faces of excavations	m3	1		
D	150mm Thick ground floor slab	m2	8		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	REINFORCEMENT				
	High yield square twisted reinforcement bars to B.S. 4461 including cutting, bending, hoisting, fixing, binding wire and spacing blocks as described in:-				
A	8mm Diameter bars	kg	17		
B	110mm Ditto	kg	43		
	Fabric Mesh Reinforcement to BS 4483				
C	B.R.C mesh A. 142 to B.S. 4483 in concrete surface bed with 300mm side and end laps (measured nett - allow for laps)	m2	8		
	SAWN FORMWORK TO:-				
D	Sides of strip foundations	m2	5		
E	Edges of floor slab over 150mm but not exceeding 225mm high	m	12		
	FOUNDATION WALLING				
	Rough chisel dressed natural quarry stone, bedded and jointed in cement and sand motar 1:3 including 20 mm wide hoop iron reinforcement in alternate course as described in:-				
F	200mm Thick walling	m2	17		
	SUPERSTRUCTURE CONCRETE WORK				
	STRUCTURAL FRAME				
	BEAMS				
	Vibrated and reinforced insitu concrete class 25 in:-				
G	Ring beams	m3	1		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	High tensile and mild steel reinforcement to B.S. 4461 and B.S 4449 respectively in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks				
A	8mm Diameter bars	kg	115		
B	12mm Ditto	kg	45		
	Sawn formwork to:-				
C	Sides and soffits of beams	m2	15		
	SUSPENDED SLAB				
	Vibrated and reinforced insitu concrete class 25 in:-				
D	150mm Thick roof slab	m2	8		
	Sawn formwork to:-				
E	Soffits of suspended slab	m2	8		
F	Edges of slab over 150mm but not exceeding 225mm high	m	12		
	Reinforcement				
	High tensile and mild steel reinforcement to B.S. 4461 and B.S 4449 respectively in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks				
G	8mm Diameter bars	kg	10		
H	10mm Ditto	kg	108		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	MASONRY WALLING				
	EXTERNAL WALLING				
	Smooth dressed natural stone from approved quarry bedded and jointed in gauged mortar (1:3) with and including 20mm hoop iron reinforcement in other alternate course as described in:-				
A	200mm Thick external wall	m2	19		
B	Extra over stone walling for fine chisel dressing on one side	m2	19		
	Louvre Block Walling				
C	200 mm thick precast concrete louvre block walling, bedded and jointed in (1:4) cement and sand mortar and reinforced with and including 10 mm square bars in vertical joints	m2	5		
	Hessian based bituminous felt damp poofing course laid on cement and sand (1:4) mortar				
D	200mm Wide	m	12		
	ROOFING				
	CONCRETE ROOF SLAB FINISHES				
	WATERPROOFING				
	Surface Preparation				
E	Hack-off concrete surfaces to expose the aggregates, clean the dust to receive waterproofing material (m.s)	m2	8		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	Prepare and apply "Coprox" or equal and approved waterproofing material in accordance with manufacturer's printed instructions and specifications with a ten year guarantee as described on:-				
A	Roof terrace surfaces to approved falls	m2	8		
B	Extra over waterproofing for sealing coprox material or equal and approved to rainwater out/inlet (m.s).	No			
	A letter of guarantee shall be required for the waterproofing				
	12mm Thick cement and sand (1:3) screed laid to falls on:-				
C	Roof terraces	m2	8		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	DOORS				
	METAL DOORS				
	Supply, assemble and fix the following purpose made louvred mild steel doors from an approved manufacturer, primed with red oxide primer before delivery to site; complete with hinges flush bolts, drop bolts, union steel door locks with handles, building in lugs to jambs, plugging and screwing to head and sill; and bedding frames in water proof cement and sand (1:3) mortar; and pointing in approved mastic including oiling , easing and adjusting				
A	Double leaf door overall size 2000x2400mm high Touch up primer, prepare and apply two undercoats and one finishing coat gloss paint on metal work	No	1		
B	General surfaces of mild steel doors	m2	9		
	FINISHES				
	WALL FINISHES				
	EXTERNAL WALL FINISHES				
	10mm Deep half round neat horizontal joints (key pointing) in cement and sand mortar (1:3) as described on:-				
C	Stone wall surfaces	m2	24		
	15mm Thick cement and sand (1:3) render/backing, finished with wood float to:-				
D	Concrete column and beam surfaces to receive brick cladding (m.s)	m2	5		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	230x75x20mm Thick scratched facing bricks on cement and sand 1:3 backing (m.s), including chicken wire nailed to wall, pointed with neat recessed horizontal joints in coloured mortar to match as described on:-				
A	Rendered concrete surfaces	m2	5		
	INTERNAL WALL FINISHES				
	12mm (minimum) Two-coat lime plaster as described to:-				
B	Stone wall surfaces	m2	37		
	Surface preparation by skim coating				
C	Prepare and apply premixed joint compound from approved manufacturer to plastered wall and fair faced concrete surfaces to receive paint (m.s)	m2	37		
	Prepare and apply one undercoat and two finishing coats of first quality silk vinyl paint as supplied by CROWN BERGER LTD. (or equivalent) on:-				
D	Prepared wall and concrete surfaces	m2	37		
	FLOOR FINISHES				
	INTERNAL ROOMS & STORE FINISHES				
	Cement and sand (1:3) screeds, backings, beds etc				
E	40mm Thick screed	m2	6		
F	100mm Skirting	m	9		
	Totals carried to Civil works collection page.				

No	Description	Unit	Qnty	Rate	Amount
	CEILING FINISHES				
	PLASTERING & PAINTING				
	12mm (minimum) Two-coat lime plaster as described on:-				
A	Horizontal soffits of roof slabs Surface preparation by skim coating	m2	6		-
B	Prepare and apply premixed joint compound from approved manufacturer to plastered ceiling surfaces to receive paint (m.s)	m2	6		
	Prepare and apply one undercoat and two finishing coats of first quality silk vinyl paint as supplied by CROWN BERGER LTD. (or equivalent) on:-				
C	Soffits of plastered surfaces	m2	6		
	BUILDERS WORK IN CONNECTION WITH SERVICES				
	Builder's Work incidental to sanitary fittings, internal plumbing and drainage, reticulation, electrical, TV, data and telephone installations, concealed fixings etc.				
D	Allow for making holes, chasing walls, floors, inclusion of sleeves and other items necessary for the proper carrying out of the installations incuding all builder's work of making good all surfaces	Item	1	**100,000**	**100,000** -
	Totals carried to Civil works collection page.				

No	Description	Unit			Amount
	COLLECTION SUMMARY FOR CIVIL WORKS				
	Carried From page		90		
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	TOTAL FOR CIVIL WORKS (PHASE 1A RELATED)				

No	Description	Unit	Qty	Rate	Amount
	DAYWORKS AND SCHEDULE OF RATES				
	10.1 DAYWORKS AND SCHEDULE OF RATES				
	The rates for dayworks where appropriate shall be used to price variations for any items similar to those listed in the dayworks schedule even where the dayworks are not ordered (i.e shall serve as a schedule of rates)				
	PLANT				
	Rate to include all operational costs , maintenance, fuel, idle time, travelling, overtime, profits and overheads. Payment will be made for time employed upon the works only. Where urealistically high rates are used, the Project Quantity Surveyor will have the discretion to make any suitable adjustments to reflect the going market rates. All items must be priced.				
A	D4 tractor with P.C.U.	Hrs	10		
B	Ditto dozer attachment	Hrs	10		
C	Motor grader Cat. 14 or equivalent complete with scarifier	Hrs	100		
D	Mechanical excavator 22 cu ft bucket	Hrs	100		
E	Vibrating roller	Hrs	10		
F	8-10 ton pneumatic self propelled roller	Hrs	10		
G	Small hand propelled vibrating roller	Hrs	10		
H	Whacker hand compactor or equivalent	Hrs	10		
J	Tractor excavator (2m3) with loader attachments	Hrs	10		
K	7 ton tipper lorry	Hrs	10		

No	Description	Unit	Qty	Rate	Amount
	PLANT				
A	9 ton tipper lorry	Hrs	10		
B	15 ton ditto	Hrs	10		
C	Half ton delivery van	Hrs	10		
D	Compressor (250cfm)	Hrs	10		
E	2" water pump with motor	Hrs	10		
F	Ditto 3"	Hrs	10		
G	Concrete mixer 14/10	Hrs	10		
H	Concrete mixer 10/7	Hrs	10		
J	Concrete vibrator (poker type)	Hrs	10		
K	Self propelled 2000 gallons water tank complete with pump	Hrs	10		
L	1000 gallons Pressure bitumen distributor	Hrs	10		

No	Description	Unit	Qty	Rate	Amount
	LABOUR				
	Cutting chases in concrete slab; running with cement mortar (1:4) and making good as necessary				
A	For small pipe conduit.	m	1		
	Cutting chases in blockwork or stonework; running with cement mortar (1:4) and making good as necessary to match				
B	For small pipe conduit.	m	1		
	Allow for cutting and leaving all necessary holes, notches, mortices, sinkings both in the structure and its finishes and for all making good in connection with the following in concealed conduits or cables for:-				
C	Lighting points	No	1		
D	Switch points	No	1		
E	Socket outlet points	No	1		
F	Television aerial outlet	No	1		
G	Computer / telephone points	No	1		
H	CCTV points	No	1		
J	Distrubition board points	No	1		
K	Consumer units ponts	No	1		

No	Description	Unit	Qty	Rate	Amount
	LABOUR				
	Cut away for, make good and attend in all trades on the subcontractor installing the following fittings, wastes under floor slabs, supply pipes fixed on walls including cutting holes, chases and making good finishes				
A	WC	No	1		
B	Urinal bowl	No	1		
C	Urinal- slab/stainless steel	m	1		
D	Wash hand basins	No	1		
E	Shower	No	1		
F	Towel rail	No	1		
G	Toilet roll dispenser	No	1		
H	Soap dispenser	No	1		
J	Mirror	No	1		

No	Description	Unit	Qty	Rate	Amount
	LABOUR				
	Cutting chases in new concrete slab; running with cement mortar (1:4) and making good as necessary to match				
A	For small pipe	m	1		
B	For large pipe	m	1		
	Cutting chases in blockwork or stonework; running with cement mortar (1:4) and making good as necessary to match				
C	For small pipes	m	1		
D	For large pipe	m	1		
	Holes for pipes or the like in 200mm thick blockwork or stonework and making good as necessary to match				
E	For large pipes	No	1		
F	For small pipes	No	1		
	Holes for pipes or the like in 175mm thick reinforced concrete slab and making good as necessary to match				
G	For large pipes	No	1		
H	For small pipes	No	1		

No	Description	Unit	Qty	Rate	Amount
	LABOUR				
	Rate to include all accomodation, transport, insurances travelling time, small tools of trade, overtime, profits and overheads. Payment will be made for time employed upon the works only. All items must be priced.				
A	Watchman (including lights, days, night, Sunday or Public holiday watching)	Hrs	1		
B	Unskilled labour	Hrs	1		
C	Skilled labour	Hrs	1		
D	Mason	Hrs	1		
E	Carpenter	Hrs	1		
F	Steel fixer	Hrs	1		
G	Welder	Hrs	1		
H	Concretor	Hrs	1		
J	Blaster (certified)	Hrs	1		
K	Joiner	Hrs	1		
L	Pipe layer	Hrs	1		
M	Tile layer	Hrs	1		
N	Painter	Hrs	1		

No	Description	Unit	Qty	Rate	Amount
	MATERIALS				
	All materials must comply with the specifications. Rates to include delivery to site, handling, storage, profits and overheads				
A	Course aggregate	m3	1		
B	Fine aggregate	m3	1		
C	Murram	m3	1		
D	Hardcore	m3	1		
E	Quarry chips	m3	1		
F	125mm Thick cement improved natural base with 4% cement content	m2	1		
G	125mm Thick graded crushed stone base (GCS)	m2	1		
H	32mm Thick asphalt concrete wearing course 0/10mm aggregate	m2	1		
J	Single seal surface dressing (10/14mm)	m2	1		
K	Double seal surface dressing (14/20mm and 6/10mm)	m2	1		
L	25mm Thick asphalt concrete 0/14 aggregate 6% binder content 80/100	m2	1		
M	Red soil	m3	1		
N	Building sand	t	1		
P	Ordinary portland cement	Bag	1		
Q	Random rubble hard granite stones in gabbion boxes made of 2.7mm diameter zinc coated wire	m3	1		

No	Description	Unit	Qty	Rate	Amount
A	"Random rubble" stone pitching	m2	1		
B	"540x540x65mm precast concrete lattice blocks" stone pitching	m2	1		
C	50mm Thick top dressing/soil media with a fine tilth for seeding/planting	m2	1		
D	225x225mm building quarry stone	m	1		
E	225x150mm ditto	m	1		
F	425x225x225mm machine cut Ndarugu/Juja stone	No	1		
G	425x225x150mm ditto	No	1		
H	425x225x100mm ditto	No	1		
J	750x150mm PCC shallow invert block drain	m	1		
K	600x450x225mm invert block drain with two coarses side slabs	m	1		
L	Shallow IBD drain size 450x390x125mm	m	1		
M	356x405mm cast iron concrete filled gully grating	No	1		
N	300mm diameter ogee concrete pipes	m	1		
P	900mm ditto	m	1		
Q	80mm Thick heavy duty concrete paving blocks	m2	1		
R	60mm Thick medium duty concrete paving blocks	m2	1		
S	600x600x50mm precast concrete paving slabs	m2	1		
T	125x150mm half battered kerb	m	1		

No	Description	Unit	Qty	Rate	Amount
A	125x100mm channel block	m	1		
	MATERIALS				
A	75x50mm sawn celcured cypress	m	1		
B	100x50mm ditto	m	1		
C	150x50mm ditto	m	1		
D	150x25mm ditto	m	1		
E	225x25mm ditto	m	1		
F	250x25mm ditto	m	1		
G	75x50mm wrot cypress	m	1		
H	125x25mm ditto	m	1		
J	100x50mm ditto	m	1		
K	150x50mm ditto	m	1		
L	200x50mm ditto	m	1		
M	250x50mm ditto	m	1		

No	Description	Unit	Qty	Rate	Amount
	MATERIALS				
A	75x50mm wrot prime grade mahogany	m	1		
B	125x25mm ditto	m	1		
C	100x50mm ditto	m	1		
D	150x50mm ditto	m	1		
E	200x50mm ditto	m	1		
F	Wrot formwork	m2	1		
G	500 gauge polythene DPM	m2	1		
H	Tropicalised mastic waterproofing	m2	1		
J	Vandex waterproofing	m2	1		
K	APP roofing felt	m2	1		
L	50mm Thick Gypsium partition	m2	1		
M	Ditto timber partition	m2	1		
N	Metal composite partition	m2	1		
P	Vertical window blinds	m2	1		
Q	Roller window blinds	m2	1		
R	20mm laminated MDF	m2	1		
S	18mm laminated MDF Board	m2	1		
T	20mm thick blockboard	m2	1		
A	Ditto mahogany veneered on one side	m2	1		
B	Ditto mahogany veneered on both sides	m2	1		
C	6mm plywood	m2	1		

No	Description	Unit	Qty	Rate	Amount
	MATERIALS				
A	150mm Thick amended top soil media with a fine tilth for seeding mixed in the ratio **Red soil: Sand: Manure (2:1:1)**	m2	1		
B	Natural lawn finish - Kikuyu/Paspallan or approved equivalent grass finish	m2	1		
C	13.5 mm Thick Polyurethane Tartan finish	m2	1		
D	Artificial turf	m2	1		
E	Synthetic material (indoor)	m2	1		
F	Polypropylene or equivalent heavy duty ball stop netting wire of 2mm diameter and 30x30mm grid	m2	1		
G	Non-slip rubber floor finish	m2	1		
H	2.5mm Thick Epoxy finish	m2	1		
J	Polished terrazzo/grano finish	m2	1		
K	Regular cut mazeras stone cladding finish	m2	1		
L	Brick facing	m2	1		
M	300x300mm Interlocking concrete tiles	m2	1		
N	600x600x10mm granito floor tiles	m2	1		
P	Heavy duty and quality floor carpet	m	1		
Q	12mm thick "celotex" softboard ceiling	m2	1		
R	Suspended/decorative/bulk head plasterboard gypsium ceiling	m2	1		
S	600x600mm acoustic ceiling panels	m2	1		

No	Description	Unit	Qty	Rate	Amount
A	Plastic/Vista ceiling	m2	1		
B	Prime grade cypress T&G ceiling	m2	1		
C	Aluminium ceiling	m2	1		
D	4mm Thick clear glass	m2	1		
E	5mm Thick clear glass	m2	1		
F	5mm thick obscured glass	m2	1		
G	6mm thick obscured glass	m2	1		
H	6mm thick georgian wired glass	m2	1		
J	6mm thick laminated glass	m2	1		
K	10mm thick laminated glass	m2	1		
L	10mm Thick Toughned roof glass	m2	1		
M	27mm Thick bulletproof glass	m2	1		
N	Powder coated aluminium framed window	m2	1		
P	Natural aluminium framed window	m2	1		
Q	8mm Thick chequered steel plate	m2	1		

No	Description	Unit	Qty	Rate	Amount
	MATERIALS				
A	Glass film	m2	1		
B	Wallmaster paint finish	m2	1		
C	2mm Thick synthetic vinyl (wall padding)	m2	1		
D	Decra roofing tiles	m2	1		
E	Gauge 26 versatile roofing sheets	m2	1		
F	Gauge 28 pre-painted corrugated roofing sheets	m2	1		
G	Gauge 26 Saflox roofing sheets	m2	1		
H	Concrete roofing tiles	m2	1		
J	Clay roofing tiles	m2	1		
K	Transluscent roofing sheets	m2	1		
L	450x600mm manhole cover & frame light duty	No	1		
M	Ditto but heavy duty	No	1		
N	Circular heavy duty manhole cover	No	1		

No	Description	Unit	Qty	Rate	Amount
	PROVISIONAL &PRIME COST SUMS				
	11. PRIME COSTS AND PROVISIONAL SUMS				
	PRIME COST SUMS				
	The following prime cost sums shall be expended in whole or in part as directed by the Architect				
A	Provide a sum of Kenya Shillings Twenty nine Million, Three Hundred and Fourty eight thousand Thousand (Kshs. 29,348,000.00) only for Electrical Installlation Works	ITEM			29,348,000
B	Allow for Profit	%			
C	Allow for Attendance	SUM			
D	Provide a sum of Kenya Shillings Thirty Six Million, Nine Hundred and three thousand Thousand (Kshs.36,903,000.00) only for Mechanical Installations Works	ITEM			36,902,320
E	Allow for Profit	%			
F	Allow for Attendance	SUM			
G	Provide a sum of Kenya Shillings One Million (Kshs.1,000,000.00) only for Signage	ITEM			1,000,000
H	Allow for Profit	%			
J	Allow for Attendance	SUM			
K	Provide a sum of Kenya Shillings One Million and Five Hundred Thousand (Kshs.1,500,00.00) only for Goalposts and Net	ITEM			1,500,000
L	Allow for Profit	%			
M	Allow for Attendance	SUM			
	Total carried to C / F.				

No	Description	Unit	Qty	Rate	Amount
	Total carried to B / F.				
	PROVISIONAL SUMS				
	The following provisional items are to be measured on completion of the works and priced in accordance with rates contained in these Bills of Quantities or pro-rata thereto or deducted in whole if not required.				
A	Provide a provisional sum of Kenya Shillings Two Million, Five Hundred Thousand (Kshs.2,500,000.00) Only for Construction of Cabinets, Lockers and Seating Benches	ITEM			2,500,000
B	Provide a provisional sum of Kenya Shillings One Milllion (Kshs. 1,000,000.00) Only for Landscaping	ITEM			1,000,000
C	Provide a Provisional sum of Kenya Shillings Fifteen Million (Kshs. 15,000,000.00) Only for Contingencies	ITEM			15,000,000
D	Provide a Provisional sum of Kenya Shillings seven Million (Kshs. 7,000,000.00) Only for Fluctuations	ITEM			7,000,000
E	Provide a Provisional sum of Kenya Shillings Fifty thousand (Kshs. 50,000.00) Only for Demolitions	ITEM			50,000
	PROJECT EXPENSES				
F	Provide for Supervision as follows: 1 No. Clerk of works, (Building and services) for the duration of project	Sum	1	500,000	500,000.00
G	Allow a provisional sum of Kshs. Two Million five hundred thousand (2,500,000) for Project Management Team and other stakeholders facilitation allowances during project implementation, as and whenever it is necessary.	Sum	1	2,500,000	2,500,000.00
H	Allow a provisional sum of Kshs. one Million five hundred thousand (1,500,000) for client's Team and other stakeholders facilitation allowances during project implementation, as and whenever it is necessary.	Item	1	1,500,000	1,500,000.00
I	Public procurement capacity building levy 0.03%	sum	1	390,000	390,000.00
	TOTAL FOR PROVISIONAL & PRIME COST SUMS				

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT KSh.
	BILL No. 1:				
	VVIP PAVILLION				
	GROUND FLOOR				
	Supply, Deliver, Install, Set to Work and Commission the				
	Following:				
1.01	Lighting point completely wired in 3x1.5mm^2 single core PVC insulated copper wires drawn into 20mm O full length heavy gauge plastic conduits cast in floor slab and concealed in the walls, but without light switches and fittings for:-				
(i)	One way switching	130	No.		
(ii)	Two way switching	20	No.		
1.02	10Amps, moulded plate in ivory white colour as MK range or approved equivalent as follows:-				
(i)	1-gang 1-way moulded plate light switch	20	No.		
(ii)	2-gang 1-way moulded plate light switch	6	No.		
(iii)	1-gang 2-way moulded plate light switch	5	No.		
1.03	Lighting fittings complete with lamps of appropriate wattage and colour rendering and fixing materials as follows:-				
(i)	Standard circular surface luminaire with white polycarbonate body and trim in white polycarbonate opal diffuser and intergral control gear for 16W 2D lamps as Thorn SuperClub or equal & approved equivalent type "L1".	45	No.		
(ii)	1 x 36W, 1200mm Surface mounted mirror strip LED fitting with diffuser as Thorn or equal and approved equivalent type "L2"	25	No.		
(iii)	1 x 38W, 1200mm LED fitting with Polycarbonate Diffuser enclosure as Philips Coreline Slim Batten or equal and approved equivalent type "L21".	22	No.		
(iv)	1 x 38W, 1200mm IP 65 rated LED fitting with Polycarbonate enclosure as Philips CoreLine Waterproof or equal and approved equivalent type "L22".	24	No.		
	Total Amount Carried Forward To Ground Floor Collection Page				

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT KSh.
(v)	36 Watts,0.9 PF cool white/5000K, 4300lm, Surface/Reccesed 600mmX600mm LED panel with low glare diffusser ,driver and connectors As Robus /OMS/THORN/PHILIPS or equivalent and Approved type "L3".	12	No.		
(vi)	Type EXIT-Surface mount LED Exit light with 3 hrs batteries backup As philips/Thorn/OMS or equivalent	4	No.		
(vii)	9W Wall mounted LED bulkhead Luminaire, with impact resistant powder-coated die-cast aluminium base, Diffuser: Textured transparent glass and galvanised steel wire protective cage with screw mounting, Integral control as RZB 501031.004.1 Alu-Standard or equal and approved. Type "L4".	2	No.		
	POWER POINTS AND ACCESSORIES				
1.04	13A SP raw power socket point completely wired in 3x2.5mm^2 single core PVC insulated copper cables drawn in 20mm diameter HG PVC conduits including all accessories but excluding the switched socket outlet	10	No.		
1.05	Hand drier power points completely wired in 3x2.5mm^2 single core PVC insulated copper cables drawn in 20mm diameter HG PVC conduits including all accessories but excluding the 20A DP fused switched connection units.	6	No.		
1.06	Solar water heating elements power points completely wired in 3x2.5mm2 single core PVC insulated copper cables drawn in 20mm diameter HG PVC conduits including all accessories but excluding the 20A DP fused switched connection units.	10	No.		
1.07	13A SP twin switched socket outlets as MK	10	No.		
1.08	20A DP moulded switch plate with neon light for hands driers above as MK /Crabtree or any other approved equivalent.	6	No.		
	Total Amount Carried Forward To Ground Floor Collection Page				

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT KSh.
	FIRE DETECTION & ALARM SYSTEM				
1.09	Fire Alarm points comprising of wiring in 1.5 sq mm 2 core fire tuff cable from Fire Alarm Panel to initiating and indicating devices drawn in 25mm0 concealed HG PVC conduits	25	No.		
1.10	Addressable Photoelectric Smoke Detector as Menvier or approved equivalent	15	No.		
1.11	Addressable Heat Detector as Menvier or approved equivalent	5	No.		
1.12	Addressable Manual Fire Alarm 'Break Glass' call points as MENVIER or approved equivalent.	2	No.		
1.13	Addressable Electronic Fire Alarm sounder complete with Red Flashing beacon as MENVIER or approved equivalent.	2	No.		
1.14	Ditto as above but for outdoor use	1	No.		
1.15	2 Loop Addressable Microprocessor based Addressable Fire Alarm Control Panel as Menvier or approved equivalent	1	No.		
	DATA, CCTV, WAP, SPEAKER AND TELEVISION OUTLET POINT				
1.16	Television outlet point comprising a draw wire drawn into 25mm 0 full length heavy gauge plastic conduits cast in floor slab and concealed in the walls and with blanking plate	2	No.		
1.17	Speaker outlet point comprising a draw wire drawn into 25mm 0 full length heavy gauge plastic conduits cast in floor slab and concealed in the walls and with blanking plate	2	No.		
1.18	CCTV outlet point comprising a draw wire drawn into 25mm 0 full length heavy gauge plastic conduits cast in floor slab and concealed in the walls and with blanking plate	6	No.		
1.19	Wireless access outlet point comprising a draw wire drawn into 25mm 0 full length heavy gauge plastic conduits cast in floor slab and concealed in the walls and with blanking plate	2	No.		
	Total Amount Carried Forward To Ground Floor Collection Page				

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT KSh.
	DISTRIBUTION BOARDS AND SUBMAINS POWER SUPPLY CABLES				
1.20	6-ways TP&N Distribution Board DB "DB-PV-GF-L2" 100Amps rating, MCB, flush mounted, metal cased unit complete with 100Amps TP&N integral isolator and with "front hinged lockable metal cover and glanding chamber to suit as Schneider Electric or approved equivalent	1	No.		
1.21	6-ways TP&N Distribution Board DB "DB-PV-GF-L4" 200Amps rating, MCB, flush mounted, metal cased unit complete with 200Amps TP&N integral isolator and with "front hinged lockable metal cover and glanding chamber to suit as Schneider Electric or approved equivalent	1	No.		
1.22	MCBs as Schneider Electric:-				
(i)	10Amps SP 500V MCB	12	No.		
(ii)	20Amps SP 500V MCB	8	No.		
(iii)	32Amps SP 500V MCB	6	No.		
(iv)	32Amps TP 500V MCB	6	No.		
(v)	63Amps TP 500V MCB	4	No.		
(vi)	SP Blanking plates	5	No.		
1.23	Standard cable loop-in box complete with lucy cut-out fuses	2	No.		
1.24	Submains comprising of 4core 10 mm^2 PVC/SWA/PVC + 1core 10 mm^2 earthing copper cable drawn in 38mm diameter heavy gauge PVC conduits cast in floor slab and concealed in the walls from the Main Meterboard to Distribution board "DB-PV-GF-L2"	50	LM.		
1.25	Submains comprising of 4core 70 mm^2 PVC/SWA/PVC + 1core 35 mm^2 earthing copper cable drawn in 38mm diameter heavy gauge PVC conduits cast in floor slab and concealed in the walls from the Main Meterboard to Distribution board "DB-PV-GF-L2"	50	LM.		
1.26	250x250x75mm Heavy gauge Galvanized steel adaptable box for Fire alarm & ICT cabling	4	No.		
	Total Amount Carried Forward To Ground Floor Collection Page				

ITEM No.	GROUND FLOOR COLLECTION PAGE	AMOUNT KSh.
1	Total Amount From Page E-1 Brought Forward;.....	-
2	Total Amount From Page E-2 Brought Forward;.....	-
3	Total Amount From Page E-3 Brought Forward;.....	-
4	Total Amount From Page E-4 Brought Forward;.....	-
	Total Amount Carried Forward To Bill Collection Page	**-**

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT KSh.
	FIRST FLOOR				
	Supply, Deliver, Install, Set to Work and Commission the Following:				
1.27	Lighting point completely wired in 3x1.5mm^2 single core PVC insulated copper wires drawn into 20mm O full length heavy gauge plastic conduits cast in floor slab and concealed in the walls, but without light switches and fittings for:-				
(i)	One way switching	55	No.		
(ii)	Two way switching	10	No.		
1.28	10Amps, moulded plate in ivory white colour as MK range or approved equivalent as follows:-				
(i)	1-gang 1-way moulded plate light switch	8	No.		
(ii)	1-gang 2-way moulded plate light switch	5	No.		
1.29	Lighting fittings complete with lamps of appropriate wattage and colour rendering and fixing materials as follows:-				
(i)	1 x 38W, 1200mm LED fitting with Polycarbonate Diffuser enclosure as Philips Coreline Slim Batten or equal and approved equivalent type "L21".	10	No.		
(ii)	36 Watts,0.9 PF cool white/5000K, 4300lm, Surface/Reccesed 600mmX600mm LED panel with low glare diffusser ,driver and connectors As Robus /OMS/THORN/PHILIPS or equivalent and Approved type "L3".	50	No.		
(ii)	Type EXIT-Surface mount LED Exit light with 3 hrs batteries backup As philips/Thorn/OMS or equivalent	4	No.		
(iii)	9W Wall mounted LED bulkhead Luminaire, with impact resistant powder-coated die-cast aluminium base, Diffuser: Textured transparent glass and galvanised steel wire protective cage with screw mounting, Integral control as RZB 501031.004.1 Alu-Standard or equal and approved. Type "L4".	2	No.		
	POWER POINTS AND ACCESSORIES				
1.30	13A SP raw power socket point completely wired in 3x2.5mm2 single core PVC insulated copper cables drawn in 20mm diameter HG PVC conduits including all accessories but excluding the switched socket outlet	22	No.		
	Total Amount Carried Forward To First Floor Collection Page				

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT KSh.
1.31	Solar water heating elements power points completely wired in 3x2.5mm^2 single core PVC insulated copper cables drawn in 20mm diameter HG PVC conduits including all accessories but excluding the 20A DP fused switched connection units.	4	No.		
1.32	13A SP twin switched socket outlets as MK	22	No.		
1.33	20A DP moulded switch plate with neon light for hands driers above as MK /Crabtree or any other approved equivalent.	4	No.		
	FIRE DETECTION & ALARM SYSTEM				
1.34	Fire Alarm points comprising of wiring in 1.5 sq mm 2 core fire tuff cable from Fire Alarm Panel to initiating and indicating devices drawn in 25mm0 concealed HG PVC conduits	15	No.		
1.35	Addressable Photoelectric Smoke Detector as Menvier or approved equivalent	10	No.		
1.36	Addressable Heat Detector as Menvier or approved equivalent	2	No.		
1.37	Addressable Manual Fire Alarm 'Break Glass' call points as MENVIER or approved equivalent.	2	No.		
1.38	Addressable Electronic Fire Alarm sounder complete with Red Flashing beacon as MENVIER or approved equivalent.	1	No.		
	DISTRIBUTION BOARDS AND SUBMAINS POWER SUPPLY CABLES				
1.39	Submains comprising of 4core 10 mm^{2}PVC/SWA/PVC + 1core 10 mm^2 earthing copper cable drawn in 32mm diameter full length heavy gauge PVC conduits cast in floor slab and concealed in the walls from Main Meterboard to Distribution Board DB "DB-PV-01-L2"	50	No.		
1.40	6-ways TP&N Distribution Board DB "DB-PV-01-L2" 100Amps rating, MCB, flush mounted, metal cased unit complete with 100Amps TP&N integral isolator and with "front hinged lockable metal cover and glanding chamber to suit as Schneider Electric or approved equivalent	1	No.		
	Total Amount Carried Forward To First Floor Collection Page				

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT KSh.
1.41	MCBs as Schneider Electric:-				
(i)	10Amps SP 500V MCB	6	No.		
(ii)	32Amps SP 500V MCB	6	No.		
(iii)	SP Blanking plates	11	No.		
1.42	250x250x75mm Heavy gauge Galvanized steel adaptable box for Fire alarm & ICT cabling	1	No.		
Total Amount Carried Forward To First Floor Collection Page					

ITEM No.	FIRST FLOOR COLLECTION PAGE	AMOUNT KSh.
1	Total Amount For Page E-6 Brought Forward;.....	-
2	Total Amount For Page E-7 Brought Forward;.....	-
3	Total Amount For Page E-8 Brought Forward;.....	-
	Total Amount Carried Forward To Bill Collection Page	**-**

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT KSh.
	SECOND FLOOR				
	Supply, Deliver, Install, Set to Work and Commission the Following:				
1.43	Lighting point completely wired in 3x1.5mm^2 single core PVC insulated copper wires drawn into 20mm O full length heavy gauge plastic conduits cast in floor slab and concealed in the walls, but without light switches and fittings for:-				
(i)	One way switching	55	No.		
(ii)	Two way switching	10	No.		
1.44	10Amps, moulded plate in ivory white colour as MK range or approved equivalent as follows:-				
(i)	1-gang 1-way moulded plate light switch	8	No.		
(ii)	1-gang 2-way moulded plate light switch	5	No.		
1.45	Lighting fittings complete with lamps of appropriate wattage and colour rendering and fixing materials as follows:-				
(i)	Standard circular surface luminaire with white polycarbonate body and trim in white polycarbonate opal diffuser and intergral control gear for 16W 2D lamps as Thorn SuperClub or equal & approved equivalent type "L1".	10	No.		
(ii)	1 x 36W, 1200mm Surface mounted mirror strip LED fitting with diffuser as Thorn or equal and approved equivalent type "L2"	2	No.		
(ii)	1 x 38W, 1200mm LED fitting with Polycarbonate Diffuser enclosure as Philips Coreline Slim Batten or equal and approved equivalent type "L21".	5	No.		
(iii)	Type EXIT-Surface mount LED Exit light with 3 hrs batteries backup As philips/Thorn/OMS or equivalent	4	No.		
(iv)	230W, High Bay LED fitting with Polycarbonate Diffuser enclosure, IP 65 rated as Philips GentleSpace gen3 or equal and approved equivalent type "L31".	6	No.		
(v)	300W, LED Flood light fitting with Acrylate Diffuser enclosure, IP 66 rated as Philips Coreline tempo X-Large or equal and approved equivalent type "L32".	8	No.		
	Total Amount Carried Forward To Second Floor Collection Page				

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT KSh.
	9W Wall mounted LED bulkhead Luminaire, with impact resistant powder-coated die-cast aluminium base, Diffuser: Textured				
(vi)	transparent glass and galvanised steel wire protective cage with screw mounting, Integral control as RZB 501031.004.1 Alu-Standard or equal and approved. Type "L4".	2	No.		
	POWER POINTS AND ACCESSORIES				
	13A SP raw power socket point completely wired in 3x2.5mm^2				
1.46	single core PVC insulated copper cables drawn in 20mm diameter HG PVC conduits including all accessories but excluding the switched socket outlet	22	No.		
1.47	13A SP twin switched socket outlets as MK	22	No.		
1.48	4core 10sq. mm PVC insulated cable + 1C10sqmm single core earthing cable From 'DB-PV-02-L2' to LIFT isolator	15	LM		
1.49	IP25 63A TPN isolator for item 1.48 above	1	No.		
	Hand drier power points completely wired in 3x2.5mm^2 single core				
1.50	PVC insulated copper cables drawn in 20mm diameter HG PVC conduits including all accessories but excluding the 20A DP fused switched connection units.	4	No.		
1.51	20A DP moulded switch plate with neon light for hands driers above as MK /Crabtree or any other approved equivalent.	4	No.		
	FIRE DETECTION & ALARM SYSTEM				
	Fire Alarm points comprising of wiring in 1.5 sq mm 2 core fire				
1.52	tuff cable from Fire Alarm Panel to initiating and indicating devices drawn in 25mm0 concealed HG PVC conduits	15	No.		
1.53	Addressable Photoelectric Smoke Detector as Menvier or approved equivalent	9	No.		
1.54	Addressable Heat Detector as Menvier or approved equivalent	3	No.		
1.55	Addressable Manual Fire Alarm 'Break Glass' call points as MENVIER or approved equivalent.	2	No.		
1.56	Addressable Electronic Fire Alarm sounder complete with Red Flashing beacon as MENVIER or approved equivalent.	1	No.		
	Total Amount Carried Forward To Second Floor Collection Page				

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT KSh.
	DISTRIBUTION BOARDS AND SUBMAINS POWER SUPPLY CABLES				
1.57	Submains comprising of 4core 10 mm2 PVC/SWA/PVC + 1core 10 mm2 earthing copper cable drawn in 32mm diameter full length heavy gauge PVC conduits cast in floor slab and concealed in the walls from Main Meterboard to Distribution Board DB "DB-PV-02-L2"	50	No.		
1.58	6-ways TP&N Distribution Board DB "DB-PV-02-L2" 100Amps rating, MCB, flush mounted, metal cased unit complete with 100Amps TP&N integral isolator and with "front hinged lockable metal cover and glanding chamber to suit as Schneider Electric or approved equivalent	1	No.		
1.59	MCBs as Schneider Electric:-				
(i)	10Amps SP 500V MCB	10	No.		
(ii)	32Amps SP 500V MCB	4	No.		
(iii)	40Amps TP 500V MCB	2	No.		
(iv)	SP Blanking plates	5	No.		
1.60	250x250x75mm Heavy gauge Galvanized steel adaptable box for Fire alarm & ICT cabling	1	No.		
	Total Amount Carried Forward To Second Floor Collection Page				

ITEM No.	SECOND FLOOR COLLECTION PAGE	AMOUNT KSh.
1	Total Amount For Page E-10 Brought Forward;.....	-
2	Total Amount For Page E-11 Brought Forward;.....	-
3	Total Amount For Page E-12 Brought Forward;.....	-
	Total Amount Carried Forward To Bill Collection Page	**-**

ITEM No.	BILL NO. 1 COLLECTION PAGE	AMOUNT KSh.
	Total Amount From page E-5 Brought Forward;.....	-
	Total Amount From page E-9 Brought Forward;.....	-
	Total Amount From page E-13 Brought Forward;.....	-
	Total for Bill No 1 C/F to Bills summary Page	**-**

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT KSh.
	BILL No. 2: ABLUTION BLOCK				
	Supply, Deliver, Install, Set to Work and Commission the Following:				
2.01	Lighting point completely wired in 3x1.5mm^2 single core PVC insulated copper wires drawn into 20mm O full length heavy gauge plastic conduits cast in floor slab and concealed in the walls, but without light switches and fittings for:-				
(i)	One way switching	64	No.		
(ii)	Two way switching	6	No.		
(iii)	Photocell switching	6	No.		
2.02	10Amps, moulded plate in ivory white colour as MK range or approved equivalent as follows:-				
(i)	1-gang 1-way moulded plate light switch	4	No.		
(ii)	2-gang 1-way moulded plate light switch	4	No.		
(iii)	1-gang 2-way moulded plate light switch	2	No.		
2.03	Lighting fittings complete with lamps of appropriate wattage and colour rendering and fixing materials as follows:-				
(i)	Standard circular surface luminaire with white polycarbonate body and trim in white polycarbonate opal diffuser and intergral control gear for 16W 2D lamps as Thorn SuperClub or equal & approved equivalent type "L1".	45	No.		
(ii)	1 x 36W, 1200mm Surface mounted mirror strip LED fitting with diffuser as Thorn or equal and approved equivalent type "L2"	12	No.		
(iii)	Type EXIT-Surface mount LED Exit light with 3 hrs batteries backup As philips/Thorn/OMS or equivalent	2	No.		
	Total Amount Carried Forward To Bill No. 2 Collection Page				

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT KSh.
	EXTERNAL LIGHTING				
(v)	300W, LED Flood light fitting with Acrylate Diffuser enclosure, IP 66 rated as Philips Coreline tempo X-Large or equal and approved equivalent type "L32".	12	No.		
(vi)	20A 240V 3P contactor for switching external lights as TELEMECANIQUE complete with housing and all accessories.	2	No.		
(vii)	A photocell unit to fit 70-75 Lux switch on level and 1.5 Maximum differential and wired to energize the contactors complete with a D.P override switch as Thorn QPK	2	No.		
	POWER POINTS AND ACCESSORIES				
2.04	13A SP raw power socket point completely wired in 3x2.5mm^2 single core PVC insulated copper cables drawn in 20mm diameter HG PVC conduits including all accessories but excluding the switched socket outlet	4	No.		
2.05	13A SP single/twin switched socket outlets as MK	4	No.		
2.06	Hand drier power points completely wired in 3x2.5mm^2 single core PVC insulated copper cables drawn in 20mm diameter HG PVC conduits including all accessories but excluding the 20A DP fused switched connection units.	6	No.		
2.07	20A DP moulded switch plate with neon light for hands driers above as MK /Crabtree or any other approved equivalent.	6	No.		
	DISTRIBUTION BOARDS AND SUBMAINS POWER SUPPLY CABLES				
2.08	8-ways 100Amps Consumer Unit 'CU-AB-XX-L1' & 'CU-AB-XX-L2' , MCB, flush mounted, metal cased unit complete with 100Amps SP&N integral isolator as Schneider Electric or approved equivalent	2	No.		
2.09	MCBs as Schneider Electric:-				
(i)	10Amps SP 500V MCB	6	No.		
(ii)	30Amps SP 500V MCB	4	No.		
(iii)	SP Blanking plates	4	No.		
2.10	Standard cable loop-in box complete with lucy cut-out fuses	2	No.		
2.11	3 Core 10sq.mm PVC/SWA/PVC copper cables from the Main Meterboard to 'CU-AB-XX-L1' & 'CU-AB-XX-L2' in ablution blocks	250	LM		
	Total Amount Carried Forward To Bill No. 2 Collection Page				

ITEM No.	BILL NO. 2 COLLECTION PAGE	AMOUNT KSh.
	Total Amount For Page E-15 Brought Forward;.....	-
	Total Amount For Page E-16 Brought Forward;.....	-
	Total for Bill No 2 C/F to Bills summary Page	**-**

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT (Ksh.)
	BILL No. 3: GATE HOUSE				
3.01	Lighting points comprising wired in 3 x 1.5mm^2 PVC/ SC CU cables drawn in 20mm 0 concealed HG PVC conduits complete with all other accessories but excluding switches as follows:-				
i)	One way switching	6	No		
3.02	10A, moulded ivory type switch plates as MK range or approved equivalent as follows:-				
i)	One gang one way	1	No		
ii)	Two gang one way	5	No		
3.03	**LIGHTING FITTINGS** Lighting fittings complete with lamps of appropriate wattage and colour rendering and fixing materials as follows:-				
i)	1200mm 36W HPF single batten fluorescent luminaire complete with tube as Philips or approved equivalent.	1	No		
ii)	300W, LED Flood light fitting with Acrylate Diffuser enclosure, IP 66 rated as Philips Coreline tempo X-Large or equal and approved equivalent type "L32".	4	No.		
	POWER POINTS				
3.04	Socket outlet power points comprising wiring in 3 x 2.5mm PVC/SC CU cables drawn in 25mm 0 concealed HG PVC conduits including all conduit accessories but excluding plates.	4	No.		
3.05	13A, Twin switched moulded socket outlet plates as Crabtree or approved equivalent.	2	No.		
3.06	Hand drier power points comprising wiring in 3 x 2.5mm^2 PVC/SC CU cables drawn in 25mm ® concealed HG PVC conduits including all conduit accessories.	2	No.		
3.07	20A, DP switched as MK or approved equivalent.	2	No.		
	Total Cost Carried Forward To Bill No. 3 Collection Page				

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT (Ksh.)
	CONSUMER UNIT & SUB-MAINS				
3.08	8-way 100A SP flush mounted consumer unit 'CU-AB-XX-L7' complete with integral isolator as Schneider Electric or approved equivalent.	1	No		
3.09	MCBs for item No.3.08 above as Schneider Electric or approved equivalent as follows:-				
i)	10A, SP	4	No		
ii)	20A, SP	2	No		
iii)	32A, SP	2	No		
iv)	Blanking plates	2	No		
3.10	Sub-mains cables comprising wiring 3 Core 10sq.mm PVC/SWA/PVC Cu cables drawn in 25mm ® concealed HG PVC conduits from adaptable box to consumer unit	20	LM		
3.11	$10mm^2$ 3-C PVC/SWA/PVC copper cable running from Main meter board to Adaptable box for Gate house	150	Lm		
3.12	Telephone point complete with Draw wire in concealed 20mm HG PVC conduits and complete with outlet plate	1	No.		
3.13	200x200x75mm Heavy gauge Galvanized steel adaptable box for power	1	No.		
3.14	150 X 150 X 75mm G.I Fully Reccessed Telephone Draw box	1	No		
	Total Cost Carried Forward To Bill No. 3 Collection Page				

ITEM No.	BILL No. 3 COLLECTION PAGE	AMOUNT (Ksh.)
1	TOTAL B/F Page E-18.....	-
2	TOTAL B/F Page E-19.....	-
3	**Sub -total for 1 No. Gate House**	-
4	No. of Typical gates (= 5)	
	Total for Bill No 3 C/F to Bills summary Page (= Item 3 x Item 4)	**-**

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT (Ksh.)
	BILL No. 4: MECHANICAL PUMP ROOM SUPPLY, DELIVER, INSTALL SET TO WORK AND COMMISSION THE FOLLOWING:- **LIGHTING**				
4.01	Lighting points wired in 3x1.5 mm^2 PVC/SC CU cables drawn in 20 mm 0 concealed HG PVC conduits complete with all necessary accessories but excluding switches for: i) One way switching	2	No.		
4.02	10A moulded ivory type switch plates as MK range or approved equivalent as follows: i) One gang one way	4	No .		
4.03	Lighting fittings complete with lamps of appropriate wattage and colour rendering and fixing materials as follows:				
i)	2 x 36W, 1200mm HPF fluorescent fitting with GRP body and acrylic diffuser as Thorn LU Europroof.	1	No.		
ii)	Die Cast Aluminium Bulkhead With Opal, Polycarbonate Diffuser Complete With 18w Pl Lamp As Massive Boston	2	No.		
	POWER				
4.04	Socket outlet power points wired in 3 x 2.5mm^2 PVC/SC copper cables drawn in 20mm 0 concealed HG PVC conduits including all conduit accessories but excluding plates	2	No		
4.05	13A, Twin switched metal clad socket outlet plates as MK or approved equivalent.	2	No		
4.06	Water booster pump power point comprising wiring in 5 x 6mm^2 PVC/SC CU cables drawn in 38mm © concealed HG PVC conduits including all conduit accessories.	2	No.		
4.07	Circulation pump power point comprising wiring in 5 x 6mm^2 PVC/SC CU cables drawn in 25mm © concealed HG PVC conduits including all conduit accessories.	1	No.		
4.08	Chlorination unit power point comprising wiring in 3 x 4mm^2 PVC/SC CU cables drawn in 25mm © concealed HG PVC conduits including all conduit accessories.	1	No.		
	Total Cost Carried Forward To Bill No. 4 Collection Page				

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT Ksh.
4.09	Borehole pump power point comprising wiring in 5 x 6mm^2 PVC/SC CU cables drawn in 25mm <1> concealed HG PVC conduits including all conduit accessories.	1	No.		
4.10	Irrigation pump power point completely wired in 5x16mm^2 single core PVC insulated copper cables drawn in 20mm diameter HG PVC conduits including all accessories but excluding the 20A DP fused switched connection unit.	4	No.		
4.11	20A, DP switched as MK or approved equivalent.	4	No.		
4.12	32A, TP isolator as MK or approved equivalent for item No.4.06, 4.07 and 4.09 above	4	No.		
4.13	63A, TP isolator as MK or approved equivalent for item No.4.10 above	2	No.		
	DISTRIBUTION BOARD & SUB-MAINS CABLES				
4.14	Sub-mains cables comprising wiring in 5 x 25mm^2 PVC/SWA/PVC /SC cables drawn in 50mm <1> concealed HG PVC conduits from cable loop-in box to distribution board "DB-PV-GF-L4"	100	LM		
4.15	Sub-mains cables consisting of 4C, 16mm^2 PVC/SWA/PVC insulated	120	LM		
4.16	Cable glands for item 4.15 above	4	No.		
4.17	6 way 100A TPN flush mounted distribution board DB "DB-PV-GF-L4" as Crabtree or approved equivalent.	1	No.		
4.18	MCBs for Item No 4.17 above as Schneider Electric or approved equivalent as follows:-				
i)	10A, SP	1	No.		
ii)	16A, SP	1	No.		
iii)	32A, SP	1	No.		
iv)	20A, TP	1	No.		
v)	32A, TP	4	No.		
vi)	40A, TP	2	No.		
vii)	TP Blanking plates	3	No.		
4.19	Standard cable loop-in box complete with lucy cut-out fuses	1	No		
	FIRE DETECTION & ALARM SYSTEM				
4.20	Fire Alarm points comprising wiring in 1.5mm^2 heat resistant cables drawn in 20mm0 concealed HG PVC conduits	3	No.		
4.21	Addressable Manual Fire Alarm 'Break Glass' call points as MENVIER or approved equivalent.	1	No.		
4.22	Addressable Electronic Fire Alarm sounder complete with Red Flashing beacon as MENVIER or approved equivalent.	1	No.		
4.23	Addressable Photoelectric Smoke Detector as Menvier or approved equivalent	1	No.		
4.24	Outdoor Cable drawn in provided ducts linking to Fire alarm panel in VIP pavillion	180	LM		
	Total Cost Carried Forward To Bill No. 4 Collection Page				

Proposed Stadium Rehabilitation and Modernization, Kenyatta Stadium - Trans Nzoia County

ITEM No.	BILL No. 4 COLLECTION PAGE	Amount (Kshs)
1.2	TOTAL B/F Page E-21.....	-
	TOTAL B/F Page E-22.....	-
	Total for Bill No 4 C/F to Bills summary Page	**-**

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT KSh.
	BILL No. 5: COMMON SERVICES				
	Supply, Deliver, Install, Set to Work and Commission the Following:				
	(A.) METER BOARD				
5.01	Modular type, free standing floor mounted cubicle for both rear and front access, metal clad 14SWG, mild steel spray painted with three coats of gloss paint,415 mains L.V Switch board 'M' manufactured to BS EN60 439-1, form 2b separation fully wired for one incoming MCCB and outgoing feeders to be located at the switch room, the board shall be complete with space for 1 No. Kenya power meter with viewing perspex window, space for 3 No. C.T's for bulk metering & space to accomondate 4 No. TP MCCB's spare ways. The board shall also house the items below -	1	Item		
(i)	400A four pole busbars for power supply.	1	Item		
(ii)	400A TP MCCB main Incomer, adjustable and with trip coil as ABB or equal and approved	1	No.		
(iii)	C.T's for Ammeter complete with selector switch for all phases	3	No.		
(iv)	500A Ammeter	1	No.		
(v)	0-500V Voltmeter complete with selector switch, 5A fuse	1	No.		
(vi)	125A TPN MCCB	1	No.		
(vii)	80A TPN MCCB	1	No.		
(viii)	63A TPN MCCB	6	No.		
(ix)	50A TPN MCCB	9	No.		
(x)	50A SPN MCCB	7	No.		
	(B.) DUCTING AND MANHOLES				
5.02	100mm0 HG PVC Ducts for Power	700	Lm.		
5.03	100mm0 HG PVC Ducts for ICT	600	Lm.		
5.04	50mm0 HG PVC Ducts for ICT	100	Lm.		
5.05	100mm PVC 2mm thick heavy gauge ducts in 150mm thick concrete surround in road crossings	45	Lm.		
5.06	Trenching, laying, sifting, tiling and back filling for the ducts	1300	Lm.		
	Total Amount Carried Forward To Bill No. 5 Collection Page				-

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT KSh.
5.07	600 x 450 x 600mm deep Manhole complete with MD cover	30	No.		
5.08	300 x 300 x 300mm Manhole complete with MD cover	30	No		
5.09	HATARI Concrete tiling buried 400mm underground for the power supply cables	1100	Lm.		
5.10	Earthing of all Distribution Board & consumer unit to K.P.L.C standards	1	Lot.		-
5.11	Allow for sub-contractor's liaison with Kenya Power Company comprising the following:- i) Applying to the KPLC to disconnect and remove such services, including any power meters that may be on site. ii) Making all the required liaison with KPLC to ensure speedy disconnection, removal, and/or re-routing of all services that may be existing on site. iii) Extracting load details from the drawings iv) Calculating total load, together with necessary diversity v) Verifying the details with the engineer. vi) Getting the required documentation and letters from Client vii) Filling all the required forms, and generating correspondences for power application. viii) Presenting application and getting reference number. ix) Making regular follow-ups with Kenya Power & Lighting Company x) Facilitating inspection, approvals and certification by Kenya Power & Lighting Company xi) Providing attendance and materials required for power connection. xii) Filling out and submitting Commencement and Completion certificates xiii) Handing over all approved drawings and certificates to the client. xiv) Performing all other services required for power supply to site. xv) Building/modifying all power manholes to Kenya Power & Lighting Company standards. xvi) All other incidental Kenya Power & Lighting Company requirements/charges.	1	Item		
	Total Amount Carried Forward To Bill No. 5 Collection Page				-

ITEM No.	BILL NO. 5 COLLECTION PAGE	AMOUNT KSh.
1	Total Amount For Page E-24 Brought Forward;	-
2	Total Amount For Page E-25 Brought Forward;	-
	Total for Bill No 5 C/F to Bills summary Page	**-**

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT KSh.
	BILL No. 6: COMPOUND LIGHTING				
	Supply, Deliver, Install, Set to Work and Commission the Following:				
6.01	Post Top Lantern for IP66 post top decorative lantern with 30W LED, powder coated dark grey finish, with street or symmetrical optics, integrated dimming system as Thorn Avenue F LED or equal and approved equivalent.	42	No		
6.02	5 M street lighting column constructed from heavy gauge steel pipe and aluminium painted for post Top lamp mounting complete with wiring of 2.5mm2 twin with earth sheathed cable and associated accessories	42	No		
6.03	Earthing of each circuit to standards	10	No		
6.04	4 M column for mounting the photocell unit	1	No		
6.05	A photocell unit to fit 70-75 Lux switch on level and 1.5 Maximum diffrential and as Thorn Q.P.K and wired to energise the contactor	2	No.		
6.06	40A 30mA E.L.C.B as SIEMENS	10	No		
6.07	4mm2 2-core P.V.C/S.W.A/P.V.C copper cable	700	LM		
6.08	Trenching to a minimum depth of 0.7M	700	LM		
6.09	Tiling with "HATARI-DANGER" Tiles	1	Lot		
6.10	Back Filling	300	LM		
6.11	Cable Glands For $4mm^2$ 2 core PVC/SWA/PVC cables	20	No		
	Total Amount Carried Forward To Bill No. 6 Collection Page				-

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT KSh.
6.12	50mm 0 super impact HG Duct with 100mm concrete surround	300	LM		
6.13	40A DP MCCB as MEM or approved equivalent to fitted in the control pillar. CP2	10	No		
6.14	6-Way Consumer Unit fitted in the control pillar CP2	1	No		
9.15	30A 240V contactor as TELEMECANIQUE or approved equivalent.	5	No		
9.16	15A SP MCB	10	No		
9.17	2A HRC Fuse	10	No		
9.18	5A HRC Fuse	10	No		
9.19	5A Porcelain Fuse Carrier Block	10	No		
9.20	Free Standing Fully Weatherproof Metalclad Feeder Pillar for housing the street lighting switchgear and Controls.	1	NO		
	Total Amount Carried Forward To Bill No. 6 Collection Page				

ITEM No.	BILL NO. 6 COLLECTION PAGE	AMOUNT KSh.
1	Total Amount For Page E-27 Brought Forward;	
2	Total Amount For Page E-28 Brought Forward;	
	Total for Bill No 6 C/F to Bills summary Page	

ITEM No.	KENYATTA STADIUM KITALE - BILLS SUMMARY PAGE	AMOUNT KSh.
	Sub - Contract Preliminaries and General Conditions	
	BILL No. 1. Total Amount For VVIP Pavillion Brought Forward;.....	
	BILL No. 2. Total Amount Ablution Block Brought Forward;..	
	BILL No. 3. Total Amount For 5 No. Gate house Brought Forward;..	
	BILL No. 4. Total Amount For Pump room Brought Forward;..	
	BILL No. 5. Total Amount For Common Services Brought Forward;..	
	BILL No. 6. Total Amount For Compound Lighting Brought Forward;..	
	Allow ten milion Provisional Sum For Kenya Power Infrastructure Charges(Supply and Rerouting)	**10,000,000**
TOTAL AMOUNT FOR ELECTRICAL SERVICES WORKS CARRIED FORWARD TO FORM OF TENDER		

Amount in words:

Tender's name and stamp:

PIN NO:

Witness name in full:

Signature…….

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
1	Discrepancies clause 1.02				
2	Conditions of sub-contract Agreement clause 1.03				
3	Payments clause1.04				
4	Site location clause 1.06				
5	Scope of Contract Works clause 1.08				
6	Extent of the Contractor's Duties clause 1.09				
7	Firm price contract clause 1.12				
8	Variation clause 1.13				
9	Prime cost and provisional sum clause 1.14 (insert profit and attendance which is a percentage of expended PC or provisional sum.)				
10	Bond clause 1.15				
11	Government Legislation and Regulations clause 1.16				
12	Import Duty and Value Added Tax clause 1.17 (Note this clause applies for materials supplied only. VAT will also be paid by the sub-contractor as allowed in the summary page)				
13	Insurance company Fees clause 1.18				
14	Provision of services by the Main contractor clause 1.19				
15	Samples and Materials Generally clause 1.21				
SUB-TOTAL CARRIED TO PAGE 138					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
16	Supplies clause 1.20				
17	Bills of Quantities clause 1.23				
18	Contractor's Office in Kenya clause 1.24				
19	Builder's Work clause 1.25				
20	Setting to work and Regulating system clause 1.29				
21	Identification of plant components clause 1.3				
22	Working Drawings clause 1.32				
23	Record Drawings (As Installed) and Instructions clause 1.33				
24	Maintenance Manual clause 1.34				
25	Hand over clause 1.35				
26	Painting clause 1.36				
27	Testing and Inspection – manufactured plant clause 1.38				
28	Testing and Inspection – Installation clause 1.39				
29	Storage of Materials clause 1.41				
30	Initial Maintenance clause 1.42				
SUB-TOTAL CARRIED TO PAGE 138					**-**

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
31	Attendance Upon Tradesmen, etc. (Insert percentage only) clause 1.58				
32	Local and other Authorities notices and fees clause 1.60				
33	Temporary Works clause 1.63				
34	Patent Rights clause 1.64				
35	Mobilization and Demobilization Clause 1.65				
36	Extended Preliminaries Clause 1.66 (see appendix on page C- 24)				
37	Supervision by Engineer and Site Meetings Clause 1.67				
38	Allow for profit and Attendance for the above				
39	Amendment to Scope of Sub-contract Works Clause 1.68				
40	Contractor Obligation and Employers Obligation clause 1.69(see appendix page C-24)				
41	Any other preliminaries;				
	SUB-TOTAL CARRIED TO PAGE 138				-

ITEM	DESCRIPTION	Amount (Kshs)
A	Sub-total brought forward from page 135	-
B	Sub-total brought forward from page 136	-
C	Sub-total brought forward from page 137	-
TOTAL FOR PRELIMINARIES CARRIED FORWARD TO PRICE SUMMARY		-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	BILL No.2: Incoming mains, Water Reticulation, water storage tanks				
	Piping				
	Supply, deliver and install High Density Polyethylene (HDPE) pipes and Fittings PN 16. The pipes shall be from an approved manufacturer and will be suitable for butt or socket fusion. All HDPE pipes and fittings shall be comply to EN 12201-3.				
A	110mm diameter HDPE Piping	800	Lm		
B	75mm ditto	150	Lm		
C	63mm ditto	100	Lm		
D	50mm ditto	90	Lm		
D	25mm ditto	60	Lm		
	Extra Over piping for Compression fittings:-				
	Equal and Unequal Tees				
E	110 x 110 x 110mm tee	18	No.		
F	110 x 110 x 75mm ditto	6	No.		
G	110 x 110 x 50mm ditto	4	No.		
H	75 x 75 x 63mm ditto	2	No.		
H	75 x 75 x 50mm ditto	2	No.		
H	25 x 25 x 25mm ditto	4	No.		
	Elbows/Bends				
I	110mm bend/elbow	12	No.		
J	75mm ditto	5	No.		
K	63mm ditto	18	No.		
L	25mm ditto	15	No.		
M	110mm 450bend	12	No.		
N	75mm 450bend	4	No.		
	Reducers				
O	110 x 75mm reducer	4	No.		
P	110 x 63mm reducer	2	No.		
P	75 x 50mm reducer	2	No.		
Q	50 x 25mm ditto	9	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Unions				
R	100mm unions	15	No.		
S	75mm ditto	5	No.		
S	63mm ditto	7	No.		
	Threaded male/female Adaptors				
A	110mm threaded adaptors	20	No.		
B	75mm threaded adaptors	12	No.		
C	63mm threaded adaptors	21	No.		
D	50mm threaded adaptors	10	No.		
E	25mm threaded adaptors	8	No.		
E	25mm x 20mm threaded adaptors	10	No.		
E	110mm compression fitting with flanged Metal adaptor	14	No.		
	75mm ditto	8	No.		
	63mm ditto	6	No.		
	50mm ditto	4	No.		
	Valves				
F	100mm diameter medium pressure screw down fullway non-rising stem wedge gatevalve to BS 1952 with wheel and head joints to steel tubing. The valve to be as "Pegler" or approved equivalent.	9	No.		
G	75mm ditto	6	No.		
H	65mm ditto	6	No.		
G	50mm ditto	4	No.		
H	40mm ditto	2	No.		
I	25mm ditto	10	No.		
J	100mm Non-return valve as "Peglar" or approved equivalent.	4	No.		
K	75mm Non-return valve as "Peglar" or approved equivalent.	4	No.		
L	50mm air release valve	2	No.		
Total Cost Carried Forward To next Page Page					

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Saddle clamp				
M	110mm Saddle clamp	8	No.		
N	75mm ditto	5	No.		
N	63mm ditto	4	No.		
	End Cap				
O	110mm end cap	6	No.		
B	75mm ditto	2	Lm		
	Stand pipe				
P	20mm stand pipe complete with 20mm bend, 20mm diameter chrome plated bib tap as "Peglar" taps or equal and approved.	10	No.		
P	20mm diameter Translucent food-grade PVC,phtalate-free with polyester braid tubing reinforced with a braided polyester with a working pressure of 0-15bar complete with quick coupling adaptors on both ends suitable for connection to the bib tap above.	1	No.		
Q	**Pipe Connection** Allow for exposing Local Authority water mains to allow connection of proposed 100mm diameter piping and making good as before.	1	Item		
A	**Water Meter** 100mm water meter with flanges as 'Kent' or equal and approved equivalent for the connection to the main supply of water to site.	1	No.		
i	50mm diamter ditto	0	No.		
ii	32mm diamter ditto	0	No.		
B	**Water Meter Chamber** Water meter chamber of size 600 x 450mm for housing 1No. Bulk meter. The chamber shall be masonry built complete with metal plate door and	1	No.		
C	**Pipe Sleeves** Allow for 200mm diameter 'class 41' PVC pipe sleeves for crossing over pathways and driveways. The sleeves will be encased in 150mm concrete sorround.	180	Lm		
Total Cost Carried Forward To next Page Page					

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
E	**Valve Chamber** Valve chamber of size 450 x 450mm for housing the valves. The chamber shall be masonry built complete with metal plate door and locking	18	No.		
	Water Line Makers plates				
F	Standard pre-cast concrete fire hydrant marked 'FH' (1:3:6) base, including formwork, excavations, back filling and disposal. The plate to be painted yellow with gloss oil paint and letters in black all to the satisfaction of the Engineers.	10	No		
G	**Excavations** Excavate trench in hard soil/marram for depth not exceeding 1000mm deep and average 850mm deep, prepare bed with red soil/marram of particle size not more than 20 mm to a depth of 750mm.Bed shall be approved by Engineer before laying of pipes. Fill with same material as above and compact in layers of 75 mm and cart away surplus soil.	850	Lm		
	Fire hydrants				
A	Supply, deliver and install a 65mm diameter screw down type fire hydrant conforming to BS 750: 1977 complete with Copper alloy spindle complying with requirements of BS 2874 and having a thread machined of trapezoidal form, Cast iron spindle cap secured to the spindle by an M12 hexagonal socket set screw to BS 4168, A tapered key suitable for the spindle cap, A screwed outlet with cast iron cap attached to the hydrant body by a chain. All other necessary accessories necessary for the proper functioning of the hydrant. The hydrant to be as	3	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Fire hydrants surface box				
B	Fire hydrant surface box at ground level not less than 600x400x600mm depth complete with 100mm thick concrete base (1:3:6), 100mm block sides rendered all around in cement and sand (1:4), Approved hinged and flanged cast iron cover and frame. Covers to be clearly marked as per BS 750:1977 part II. All necessary excavations, disposal and form work.	3	No.		
	Indicator plates				
C	Standard pre-cast concrete fire hydrant marked 'FH' (1:3:6) base, including formwork, excavations, back filling and disposal. The plate to be painted yellow with gloss oil paint and letters in black all to the	3	No.		
	Fire Hydrant Accessories				
D	A suitable hydrant key and bar for operating the fire hydrant valve	3	Set		
E	65mm diameter Hydrant stand pipes	3	No.		
F	65mm diameter double female instantaneous outlets	3	No.		
G	65mm diameter x 25m long rubber lined delivery hose pipe fitted with instantaneous gun metal coupling	3	No.		
H	600 x 225 x 750mm wall mounted cabinet manufactured from 18swg mild steel and covered with red undercoat and finished with coats of red enamel to house above items.	3	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
A	**High Level Water Tank** Supply, deliver and assemble a galvanised High level water tank, made of pressed steel sectional tank plates 5mm thick plates, (type 1 and 4) and of size 1220 x 1220mm. Capacity of Tank shall be 58,000 litres and of preferred dimensions 4880 x 4880 x 24400mm high. The Tank to be complete with tank cover, mosquito proof inspection vent, internal stays, jointing material, bolts and nuts including applying two coats of non-toxic bituminous paint on the inside and two coats of aluminum paint on the outside. The tank shall be complete with the following pipe connections:- -1No. 100mm diameter overflow -1No. 100mm diameter outlet -2No.75mm diameter inlet -1No.50mm diameter borehole inlet -1No.100mm diameter washout	1	No.		
B	Float switch regulator	1	No		
C	Water level indicator	1	No		
D	Internal ladder	1	No		
E	External ladder from tank platform to tank top cover	1	No		
F	75mm diameter high pressure ball valve	2	No		
G	Galvanized steel tower 18 metres high with features as described in the particular specifications.	1	No		
H	Galvanized tower ladder and protection cage of approximately 18 metres high	1	No		
I	Galvanized platform with features described in the particular specifications.	1	No		
Total Cost Carried Forward To next Page Page					

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	High Level Water Tank Associated Pipework				
	Pipework				
	Supply, deliver and install galvanized mild steel pipes to BS 1387 class 'B' with screwed and socketed joints to BS 134 and 1256 and of approved manufacturer with galvanizing to BS 729. Contractors must allow in their pipe work prices for all the couplings, unions, connectors joints, holder bats, reducers etc. as required in the running length of the pipework and also where necessary for pipe				
A	100mm diameter GMS pipe	47	LM		
B	75mm diameter GMS pipe	58	LM		
	Valves				
C	100mm diameter approved rising stem full way high pressure flanged gate valve with wheel and jointing to tubing to be as "Peglar" or equal and approved.	2	No		
D	75mm ditto	2	No		
E	75mm non return valves	1	No		
F	75mm foot valve and strainer	1	No		
G	75mm ball valves	2	No		
	Bends/Elbow				
H	100mm dia. Bend/Elbows	9	No		
I	75mm ditto	13	No		
	Tees				
J	100 x 100 100mm Tee	1	No		
K	75 x 75 x 75mm ditto	1	No		
	Flanges				
L	100mm diameter flange	4	No		
M	75mm diameter flange	2	No		
N	75mm diameter puddle flange	1	No		
O	Testing and Commissioning				
	Allow for testing and commissioning of the High Level pressed steel water tank and associated pipework installation	1	item		
Total Cost Carried Forward To next Page Page					

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Water Booster Pump to High Level Tank				
A	Supply, deliver and install electrically driven duty and standby submersible pumps capable of delivering 6m³/hr against 4 bar . The pumps shall be fitted with a cooling sleeve to facilitate horizontal mounting. The pumps shall be supplied complete with interconnecting pipework, isolating valves, non return valves and all the necessary pipe fittings. The pump shall be protect against dry running. The pump to be as "Grundfos SP9-8" power input 2.2Kw, 3 phase.	1	Set		
	Booster Pumps Control Panel				
B	Supply, deliver and install a control panel with a removable front access cover, motor control gear, internal buttons with automatic change over "running" and "trip" neon lights control system, overload protection, power surge protection, MCBs, low and high level cutout switch at intake, button for change from automatic to manual operation plus any other necessary controls. The pumps control to incorporate interchanger for alternative operation of duty and standby pumps. and to include float switch control for high level tank and underground tank	1	No.		
C	**Voltage Stabilizer**				
	3-phase 30A power surge protector as Solatek to suite or equal and approved	1	No.		
	Electrical Works				
D	Allow for associated electrical works including wiring and fittings to the pumps, control panel and pressure vessel from a local isolator provided by others.	1	Item		
E	**Testing and Commissioning**				
	Allow for Testing and Commissioning of the booster pump installation to the satisfaction of the Engineer.	1	Sum		
Total Cost for Bill 2: Water Reticulation, Booster pump and High Level Water Storage Tank installation **Carried Forward to Summary Page**					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
3.00	**BILL No.3: Field Irrigation**				
	Piping				
	Supply, deliver and install High Density Polyethylene (HDPE) pipes and Fittings PN 16. The pipes shall be from an approved manufacturer and will be suitable for butt or socket fusion. All HDPE pipes and fittings shall comply to EN 12201-3.				
A	110mm diameter HDPE Piping	208	Lm		
B	75mm ditto	50	Lm		
C	63mm ditto	200	Lm		
D	50mm ditto	200	Lm		
E	40mm ditto	200	Lm		
F	32mm ditto	50	Lm		
	Extra Over piping for fittings:-				
	Equal and Unequal Tees				
G	110 x 110 x 110mm tee	6	No.		
H	110 x 110 x 75mm ditto	2	No.		
I	110 x 110 x 63mm ditto	4	No.		
J	75 x 75 x 63 mm ditto	2	No.		
K	63 x 63 x 32mm ditto	11	No.		
L	50 x 50 x 32mm ditto	11	No.		
M	40 x 40 x 32mm ditto	6	No.		
N	32 x 32 x 25mm ditto	8	No.		
	Elbows/Bends				
O	110mm bend/elbow	15	No.		
P	75mm ditto	2	No.		
Q	63mm ditto	6	No.		
R	40mm ditto	8	No.		
S	32mm ditto	8	No.		
T.	110mm 450bend	12	No.		
U	75mm 450bend	4	No.		
	Reducers				
V	110 x 75mm reducer	4	No.		
W	75 x 63mm reducer	2	No.		
X	63 x 50mm ditto	8	No.		
Y	50 x 40mm ditto	8	No.		
Z	40 x 32mm ditto	8	No.		
AA	32 x 25mm ditto	8	No.		
Total Cost Carried Forward To next Page Page					

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Valves				
A	100mm diameter medium pressure screw down fullway non-rising stem wedge gatevalve to BS 1952 with wheel and head joints to steel tubing. The valve to be as "Pegler" or approved equivalent.	4	No.		
B	75mm diameter ditto	4	No.		
C	63mm ditto	2	No.		
D	50mm ditto	6	No.		
E	32mm ditto	7	No.		
F	25mm ditto	7	No.		
G	100mm diameter solenoid controlled valve	0	No.		
H	50mm ditto	6	No.		
I	Allow for electrical cabling for solenoid valves	400	Lm		
J	110mm non-return valve as "Pegler" or approved equivalent.	2	No.		
K	75mm diameter ditto	2	No.		
	Instant hose coupling				
L	20mm instantatenous hose coupling water outlets	6	No.		
	Threaded male/female Adaptors				
M	110mm male threaded adaptors	9	No.		
N	75mm ditto	5	No.		
O	63mm ditto	4	No.		
P	50mm ditto	32	No.		
Q	25mm ditto	16	No.		
	Unions/ Saddle Clamps				
R	110mm pipe union	20	No.		
S	75mm ditto	6	No.		
T.	63mm ditto	18	No.		
U	50mm ditto	12	No.		
V	25mm ditto	8	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
A	**Valve Chamber**				
	Valve chamber of size 450 x 450mm for housing the valves. The chamber shall be masonry built complete with artifical turf cover to International standard and as approved by the Engineer	16	No.		
	Ditto but size 600 x 600mm	2	No.		
B	100mm diameter Class D pvc conduit	180	Lm		
	Pop - up Sprinkler Nozzle				
C	Irrigation pop-up sprinkler constructed of head- duty, ultra - violent resistant plastic.It shall have a stainless steel riser to help deter vandalism and heavy -duty stainless steel retract spring for positive pop-down. The sprinkler shall be complete with a matched precipitation rate brass noozle with adjustible screw capable of regulating the radius and flow, dark green in colour and a rubber collar for added safety on playing fields. The sprinkler shall be capable of housing protective, non-clogging filter screen, under the nozzle. It shall have a bottom 25mm threaded inlet for ease of installation. The sprinkler shall be as "Rain Bird I- 25" as manufactured by "Rain Bird corporation" or equal and approved. The pop-up sprinkler shall meet the following specifications as a minimum: i) Operating range Radius 11.9 to 17.2 meters Pressure rated 2:1 to 4.2 bars ii) Flow rate Discharge rate average of 2.86m3/hr at the rated pressure of 3.5bar Approximate Dimensions Overall height:216 mm Pop-up height: 102mm Exposed surface diameter: 510mm	18	No.		
	IRRIGATION BOOSTER PUMP				
D	Supply, deliver and install electrically driven duty and standby submersible pumps capable of delivering 54m³/hr against 8 bar . The pumps shall be fitted with a cooling sleeve to facilitate horizontal mounting. The pumps shall be supplied complete with interconnecting pipework, isolating valves, non return valves and all the necessary pipe fittings. The pump shall be protect against dry running. The pump to be as "Grundfos SP60 - 10" power input 18.5Kw, 3 phase.	1	Set		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
A	**Pumps Control** Supply, deliver and install a wall mounted constant pressure control system suitable for controlling above submersible pumps. The control system shall be capable of operating the pump and motor within the designed rpm and hp ratings. It shall have the following inbuilt protection features: soft start, dry run, overload, over/under voltage and sensor alarm. The system shall incorporate a 33litres diaphragm tank. The control system to be as "Grundfos CU321 variable frequecy drive" or equal and approved.	1	Set		
B	**Voltage Stabilizer** 3-phase 30A power surge protector as Solatek to suite or equal and approved	1	No.		
C	**Electrical Works** Allow for associated electrical works including wiring and fittings to the pumps and the control from a local isolator provided by others.	1	Item		
D	**Field Irrigation Automatic Controller** Automatic controller capable of controlling upto 8 stations including the master valve for pump control consisting of 3 independent programs with 4 start times per programme and a maximum of 4 hours run time complete with inbuilt Solar Sync function that converts the controller into a smart controller regulating irrigation based on local weather conditions; non-volatile memory ensuring infinite backup of all schedules; automatic short circuit protection,programmable delay to allow lag as the controller moves from one station to the next and sensor programmability to match sensor alarms to specific programs. To be as Hunter "X-Core" or approved equivalent.	1	No.		
E	**Excavations** Excavate trench in hard soil/marram for depth not exceeding 1000mm deep and average 600mm deep, prepare bed with red soil/marram of particle size not more than 20 mm to a depth of550mm. to engineer approval including cut and throw away.	250	Lm		
F	**Testing and Commissioning** Allow for testing and commissioning of field irrigation installation	1	item		
Total Cost for Bill 3: Field Irrigation **Carried Forward to Summary Page**					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
4.00	**GROUND FLOOR**				
4.10	**SANITARY FITTINGS INSTALLATION**				
	Supply, deliver, install, test and commission the following Sanitary appliances complete with all the accessories including all connections to the services, waste, jointing to water supply overflows, supports and all plugging and screwing to walls and floors.				
A	**Water Closet (WC) Suite**				
	Close coupled washdown WC suite comprising WC bowl with horizontal Outlet, Heavy duty seat and cover with stainless steel hinges, and 6/4 litres dual flush cistern The WC suite to be as "Duravit - D code" or equal and approved.	2	No.		
B	**Back to Wall Water Closet pan**				
	Back to wall WC pan with horizontal Outlet, Heavy duty seat and cover with stainless steel hinges and suitable for connecting a 32mm concealed cistern.The WC pan to be as "Duravit - D code" or equal and approved.	18	No.		
C	**WC Flush valves**				
	40mm diameter concealed water closet flush valve, chrome plated, back entry, with integral vacuum breaker, non hold open features and non return valve, inlet control stop and wall plate. It shall be complete with flush valve, bent flush pipe and rubber pipe connector. Flush valve to be push lever type. To be as "JAQUAR " or equal and approved.The flush valves shall be supplied with adaptor for connection to the toilet plastic flush pipe.	18	No.		
D	**Countertop Wash hand basin**				
	Countertop washbasin in white colour and of size 560 x 465mm, with tap hole and complete with pop-up chrome plated waste fitting 32mm chrome, plated bottle trap, chrome plated extension pipe to wall with flange and chrome plated angle valve. The wash basin to be as "Duravit - D code)	32	No.		
E	**Basin push tap**				
	Wall Mounted Chrome plated Bib Cock Auto Closing System non-concussive time delay press action with Built-in Control Cock With Wall Flange as "Jaquar " or equal and approved.	30	No.		
F	**Basin Mixer tap**				
	Wall mounted lever action wash hand mixer tap as "Jaguar" or equal and approved.	2	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
A	**Medical Sink** Medical sink of size 530mm x 430mm constructed from Seamless die-drawn construction of Type 304, 18-8 stainlesssteel. Interior and top surfaces polished to a nonporous Hand-Blended Just Finish with highlighted bowl rim. Fully coated underside insulated for sound and reduces condensation. Straight-sided Cmpartment with radius corners and Self- rimming top mount Grip-Rim Pluswith stainless steel mounting channels Conforming to ASME/ANSI A112.19.3M. Certified to ASME A112.19.3/CSA B45.4, Standards, Uniform Plumbing Code (UPC) and International Plumbing Code (IPC). complete with stainlesss steel drain all to be as "Franke" or approved equivalent.	2	No.		
B	**Medical Sink Faucet** Wall mounted Single Lever Surgical Purpose Elbow Action Sink Mixer (Wall Mounted) with Extended Operating Lever, & Wall Flanges as "Jaquar" or approved equivalent.	2	No.		
C	**Shower Fittings** Concealed shower fittings consisting of 15mm shower mixer for hot and cold water with swivel handle/chrome plated stella handles, concealed riser pipe, chrome plated shower arm and a swivel/adjustable shower rose and any other necessary fittings & accessories. All to be as "Cobra" or equal and approved.	22	No.		
D	**Towel Rail** Chrome plated towel rail of size 82 x 650mm long screwed to wall and complete with wall plates. All to be as "Ideal Standard"or equal and approved.	22	No.		
E	**Hand Dryer** Automatic hand dryer suitable for non-touch ON/OFF switching, complete with electronic infrared proximity switch and sensor-controlled safety switch-off. The hand dryer to be as "Starmix, airstar-T100E" or equal	8	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Soap dispenser				
A	Wall mounted Soap dispenser with a capacity of about one Litre having a press action Soap release mechanism complete with fixing screws as "Starmix" or equal and approved.	14	No.		
B	**Mirror** 5mm thick polished plate glass silver backed mirror with bevelled edges, size 2100 x 1500mm, Plugged and screwed to wall with chrome plated dome capped screws. The Mirror shall rest against a layer of 5mm thick foam.	8	no.		
C	**Soap Dish** Semi recessed built in soap tray in Vitreous China of size: 305 x 150mm in approved colour as Twyford VC 9312 WH or equal and approved.	22	No.		
D	**Slab Urinal** Floor standing Slab Urinal trough of dimensions 3200mm long and 1200mm high to BS 4880:1973 manufactured from 1.2mm thick, grade 316L stainless steel conforming to BS EN 10088:Part 2:2005 complete with: - 50mm doomed strainer Waste Outlet fitting, 13.6 litre auto cistern and cover, auto syphon and petcock , Vandal resistance Stainless Steel Downpipe, Sparge pipe and spreader, Fixing Screws , - any other necessary accessory for the proper functioning of the Urinal Urinal shall be as " Deveron Armitage sharks"	4	No.		
E	**Coat Hook** Chrome plated coat hook to be fixed with chrome plated concealed screws. To be as "Ideal standard" or equal and approved.	4	No.		
F	**Toilet Roll Holder** Covered chrome plated toilet roll holder size 119 x 80 x 81mm. To be as "Ideal standard" or equal and approved.	20	No.		
G	**Handspray fittings** with 15mm tap with and flexible tube to handspray complete with wall hook for hanging the spray. To be as "Tywford model SF7270CP" or equal and approved.	6	No.		
H	Allow for testing and commissioning of the Sanitary Fittings appliances installation to the satisfaction of the Engineer.	1	Sum		
	Total Cost for Ground Floor Sanitary Fittings Carried Forward Ground floor collection page				-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Supply, deliver install, Test and Commission: PP-R (Polypropylene Random Co-polymer) PN-20 pipes and fittings to DIN 8078 and DIN 16962 with polyfusion welded joints to DVS 2207 of approved manufacturer. Rate (Ksh)s must allow for all Metal/plastic threaded adaptors where required for the connection of sanitary fixtures, valves, sockets, sliding and fixed joints, support raceways, isolating sheaths, elastic materials, expansion arms and bends, crossovers, couplings, clippings, connectors, joints etc. as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed for the proper and satisfactory functioning of the system. The pipes will be pressure tested before the plastering of wall commences and as per the manufacturers recommended testing pressures. The pipes and pipe fittings shall be as " Agro " or approved equivalent and every batch shall be provided with Batch test certificate. NB. Pipes and pipe fittings Must be from the same Manufacturer/ Supplier.				
	PPR PIPING				
A	75mm diameter pipe	24	LM		
B	63mm ditto	36	LM		
C	50mm ditto	93	LM		
D	40mm ditto	36	LM		
E	32mm ditto	48	LM		
F	25mm ditto	150	LM		
	Elbows / Bends				
G	75mm elbows / bends	9	No.		
H	63mm ditto	5	No.		
I	50mm ditto	25	No.		
J	40mm ditto	13	No.		
K	32mm ditto	28	No.		
L	25mm ditto	150	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Equal / Unequal Tees				
A	75 X 75 X 75mm Tee	8	No.		
B	75 X 75 X 50mm Tee	12	No.		
C	63 X 63 X 50mm Ditto	12	No.		
D	63 x 63 x 25mm ditto	6	No.		
E	50 x 50 x 50mm ditto	4	No.		
F	50 x 50 x 32mm ditto	12	No.		
G	32 x 32 x 32mm ditto	13	No.		
H	32 x 32 x 25mm ditto	56	No.		
I	25 x 25 x 25mm ditto	85	No.		
	Reducers				
J	75 x 63mm reducer	8	No.		
K	75 x 50mm ditto	6	No.		
L	63 x 50mm ditto	8	No.		
M	50 x 40mm ditto	4	No.		
N	50 x 32mm ditto	12	No.		
O	50 x 25mm ditto	6	No.		
P	40 x 32mm ditto	6	No.		
Q	32 x 25mm ditto	27	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Female/Male BrassThreaded Adaptors				
A	75 x 63mm Brass threaded adaptors	8	No.		
B	75 x 50mm ditto	4	No.		
C	75 x 40mm ditto	16	No.		
D	63 x 50mm ditto	10	No.		
E	63 x 40mm ditto	18	No.		
F	50 x 40mm ditto	65	No.		
G	50 x 32mm ditto	36	No.		
H	40 x 32mm ditto	18	No.		
I	32 x 25mm ditto	24	No.		
J	25 x 20mm ditto	28	No.		
K	25 x 15mm ditto	72	No.		
L	50 x 40mm brass threaded bend	18	No.		
M	50 x 32mm ditto	18	No.		
N	25 x 15mm ditto	107	No.		
O	**Flexible Connections**				
	15mm diameter x 300mm long high quality flexible connectors complete with backnuts and jointing to gms pipe and sanitary fitting.	120	No		
P	**Angle Valve**				
	15mm diameter chrome plated angle valve with wall flange for connecting sanitary to water supply as "Cobra" or equal and approved.	120	No		
	Total Cost Carried Forward To next Page Page				

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Valves				
A	75mm diameter approved medium pressure screw down full way non-rising stem wedge gate valve to BS 5154 PN 20 for series B rating, with wheel and head joints to steel tubing and complete with round male threaded transition fittings. The gate valve to be as PEGLER or approved equivalent.	3	No.		
B	63mm ditto	2	No.		
C	50mm ditto	1	No.		
D	40mm ditto	2	No.		
E	32mm ditto	2	No.		
F	25mm ditto	2	No.		
G	20mm ditto	6	No.		
H	20mm diameter Solenoid controlled valve with timer and infrared detection unit for urinal flush pipe control complete with lighting circuit intergration with a 24hr autoflush system.	4	No.		
I	32mm air release valve	4	No.		
	Flushing and Sterilization				
J	Allow for flushing and sterilization of the entire system to the satisfaction of the Engineer.	1	Item		
K	**Valve Chamber** Valve chamber of size 450 x 450mm for housing the valves. The chamber shall be masonry built complete with metal plate door and locking mechanism	14	No.		
L	**Testing and Commissioning** Allow for Testing and Commissioning of the internal plumbing installation to the satisfaction of the Engineer.	1	Sum		
Total Cost for Ground Floor Internal Plumbing Carried Forward to VVIP Ground Floor Collection Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Ground Floor VVIP				
	Piping				
A	32mm diameter heavy gauge grey uPVC waste pipe	12	LM		
B	40mm ditto	75	LM		
C	50mm ditto	360	LM		
D	100mm diameter diameter	60	LM		
E	100mm diameter golden brown uPVC waste pipe	195	LM		
	Extra Over uPVC Pipework for fittings				
	Sweep bends				
F	40mm sweep bends	85	No.		
G	50mm ditto	10	No.		
H	100mm ditto	6	No.		
I	100mm golden brown sweep bends	36	No.		
	Elbows/bends 45o (degrees)				
J	40mm bends 45o (degrees)	28	No.		
K	50mm ditto	64	No.		
	Tees				
L	40mm diameter sweep tee	45	No.		
M	50mm diameter sweep tee	48	No.		
	Reducers				
N	40 x 32mm diameter reducer	46	No.		
O	100 x 50mm ditto	6	No.		
	Acess plugs				
P	40mm access plug	12	No.		
Q	50mm ditto	38	No.		
R	100mm ditto	15	No.		
	WC connectors				
S	100mm WC bend connector	20	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Traps				
A	32mm plastic bottle P-trap with extension to wall complete with wall flange.	40	No.		
B	50mm urinal P- running trap	0	No.		
C	50mm threaded domed stainless steel urinal outlet waste fitting	8	No.		
D	100 x 50mm floor trap set complete with stainless steel flush grating	65	No.		
E	100mm gulley trap in 300 x 300mm masonary chamber complete with cover	18	No.		
	Hydrostatic testing				
F	Allow for hydrostatic testing of drainage pipework for First floor including provision of all the required sockets and plugs	1	item		
Total Cost for Ground Floor Drainage Installation Carried Forward to VVIP Ground Collection Page					-

GROUND FLOOR COLLECTION PAGE

ITEM	DESCRIPTION		Amount (Kshs)
1	Total Cost for Sanitary Fittings Installation	5	-
2	Total Cost for Internal Plumbing Installation	9	-
3	Total Cost for Internal Drainage Installation	6	-
Total Cost for VVIP Ground Floor Carried Forward to VVIP ground floor pavillion collection Page			-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
4.4	**VVIP Solar Water Heating** Supply, delivery, installation and commissioning of solar hot water system in accordance with conditions of contract and with specifications.				
A	**300Litres Solar hot water storage cylinder** Compact pressure heat pipe solar water heater system comprising of 30 no. vacuum glass tubes of 58mm diameter x 1800mm long with a net absorbing area of 2.6m2 , 24 No. 14 mm diameter copper heat pipes concentric with vacuum tubes connected to 250 litres stainless steel pressure water tank tested to 9 bar, fabricated from 1.5mm thick stainless steel- SUS304- 1.5 suitable for horizontal mounting. the tank shall be insulated with 60mm thick Polyurethane foam and insulation protected by an outer tank fabricated from 0.41mm thick stainless steal SUS304-0.41. It should have the following connections; 20mm supply, 20mm outlet and 20mm drain.The hot water cylinder should have 1No. heating elements of 1.5Kw. It should include temperature sensor, air relief valves, safety valves and all the necessary interconnectors.Solar system shall be as "Eskarheat - heat pipe Solar Water Heater(Compact pressure) as manufactured by 'Ekarheat" or equal and approved .	4	No.		
B	**Supporting Framework** Allow for a suitable supporting frame for the above solar collectors made from 50 x 50 x 3mm mild steel angle iron fixed on to the concrete platform to Engineer's approval.	4	No.		
C	**Hot Water Circulation pump** Hot water circulation pump capable of delivering 2.0m3/ hr against 6.0 metres head coupled with 1-Phase 240W motor. The motor shall have 3 speed settings The pump shall be supplied complete with a female threaded union connections. The pump to be as "Grundfos UPS 32-80" or approved equivalent.	2	No.		
D	**Solar Water heating Control Panel** Solar water heating control panel complete with thermal sensor for controlling the heating elements, float sensor for controlling water filling to the solar water tanks solenoid valve at cold water entry and thermal sensors at supply and return pipe for controlling the circulator pump. The control panel shall have digital display press button operated. The control panel to be as Ensun or approved Equivalent	2	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
A	**Eletrical Works** Allow for all associated electrical works including wiring and conduiting from the local isolator/DP switches provided by others to the circulation pump and solar cylinder. The DP switches shall be located approximately 15m from the solar cylinder and the pump.	2	Item		
	Solar hot water Pipework and fittings PP-R (Polypropylene Random Co-polymer) PN-20 pipes and fittings to DIN 8078 and DIN 16962 with polyfusion welded joints to DVS 2207 of approved manufacturer. Rate (Ksh)s must allow for all Metal/plastic threaded adaptors where required for the connection of sanitary fixtures, valves, sockets, sliding and fixed joints, support raceways, isolating sheaths, elastic materials, expansion arms and bends, crossovers, couplings, clippings, connectors, joints etc. as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed for the proper and satisfactory functioning of the system. The pipes will be pressure tested before the plastering of wall commences and as per the manufacturers recommended testing pressures.				
	Hot Water Pipework				
B	40mm diameter PPR-PN 20 with Aluminum Lining pipework	80	Lm		
C	32mm diameter ditto	40	Lm		
D	25mm ditto	30	Lm		
	Equal/unequal tees				
E	40 x 40 x 40mm Tee	4	No.		
F	40 x 40 x 32mm Tee	6	No.		
G	40 x 40 x 25mm Tee	4	No.		
H	32 x 32 x 25mm ditto	4	No.		
I	25 x 25 x 25mm ditto	2	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Reducers				
A	40 x 32mm reducer	6	No.		
B	40 x 25mm reducer	2	No.		
C	32 x 25mm ditto	4	No.		
	Bends				
D	40mm bend	14	No.		
E	32mm ditto	6	No.		
F	25mm ditto	19	No.		
	Unions				
G	40mm ditto	6	No.		
H	32mm ditto	4	No.		
I	25mm ditto	12	No.		
	Female/Male brass threaded adaptors				
J	40mm x 32mm brass threaded adaptors	20	No.		
K	32mm x 25mm ditto	12	No.		
L	25mm x 20mm ditto	20	No.		
	Isolating Valves				
M	32mm diameter screw down full way non-rising stem wedge gate valve to BS 5154 PN20for series B rating with wheel and head, joints to steel tubing and complete with male threaded transition fittings. The isolating valve to be as Pegler or approved equivalent.	2	No.		
N	25mm ditto	4	No.		
O	20mm ditto	12	No.		
	Non Return Valve				
P	32mm diameter screwed-in cap, lift type disc bronze non-return valve to BS 5154 PN 25 for series 'B' ratings. As "Peglar" or equal and approved.	2	No.		
Q	20mm ditto	10	No.		
Total Cost Carried Forward To next Page Page					

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Air Release Valve				
A	25mm diameter air release valve	2	No.		
B	20mm ditto	2	No.		
	Hot water pipes lagging				
	Allow for lagging of hot water pipework using 25mm thick industrial grade "Amaflex" insulation (85oC) as manufactured by Armstrong Cork.Allow for insulation & cladding fixing clips, rivets, holder bats plugged and screwed for the proper and satisfactory functioning of				
C	40mm diameter PPR pipework	24	Lm		
D	32mm diameter ditto	12	Lm		
E	25mm diameter ditto	24	Lm		
	Water Booster Pump to Solar water heating system				
I	Supply, deliver and install electrically driven booster pumps capable of delivering 3m³/hr against 20 metres head complete with 60 litres pressure vessel, interconnecting pipework, isolating valves, non return valves, pipe flanges and all the necessary pipe fittings. The pump to be as "Grundfos mq" multistge centrifugal pump or equal and approved. Pumps to be coupled with single phase motor and be mounted on an anti- vibration common base plate.	0	item		
	Testing and Commissioning				
F	Allow for setting to work, testing and commissioning of the whole Solar hot water system to the satisfaction of the Engineer	1	item		
Total Cost for Solar Water Heating Installation Carried Forward to ground VVIP Pavillion Collection Page					

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
4.50	**PORTABLE FIRE EXTINGUISHERS**				
	Supply, delivery and installation of portable fire extinguishers including all the necessary mouting accessories together with agent charging, seals and inspection labels. All items shall comply to BS 5423: 1982 and BS 5306 part 3 and shall be postioned as indicated in the contract drawings.				
A	9 litres, water/carbon dioxide gas extinguisher	4	No.		
B	4.5kg carbon dioxide gas extinguisher	4	No.		
C	4.5 kg dry powder extinguisher	4	No.		
D	225 mm diameter gong manual alarm bell	4	No.		
E	Supply and fix signs indicating the words "FIRE POINT" in 80mm high letters	4	No.		
	Condensed aerosol fire extinguishing gas generating agent in a solid chemical mixture consisting of oxidant, reductant, burning rate control agent and binder complete with 10mlong fire detection wiring harness indirect type and of rated dosage of 250g as westsafe or approved equivalent	2	Item		
	Testing and Commissioning				
F	Allow for testing and commissioning of the portable fire extinguishers installations to the satisfaction of the Engineer.	1	Item		
Total Cost for Portable Fire Extinguishers Installation Carried Forward to ground VVIP Pavillion Collection Page					

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
4.6	**MECHANICAL VENTILATION**				
	VVIP GROUND MECHANICAL VENTILLATION				
A	**Extract Fan**				
i)	In-line centrifugal duct fan capable of extracting 0.24m3/S against a static pressure of 200Pa and having sound pressure level of not more than 32dB(A) at 3 metres. Power input 194 watts.The extract fan to be as Expelair XID 250 or equal and approved. The fan to be supplied complete with Speed fan controller, supports, flexible connections and anti-vibration mountings.	2	No		
C	**Extract Register**				
	Extract register of size 300 x 300mm with a volume control damper capable of an air flow rate of 0.12m3/s complete with grille box to suite.	4	No		
D	**Balancing dampers**				
	Control air flow damper of diameter size 250mm with a galvanized steel frame of 80mm deep and blades of 50mm pitch complete with canvas connection and worm drive clips as " FLOWLINE" or equal and approved.	2	No		
B	**Flexible Duct**				
	250mm insulated flexible duct complete with worm drive clips.	2	Lm		
	150mm insulated flexible duct complete with worm drive clips.	2	Lm		
C	**PVC Duct**				
	250mm diameter PVC duct complete	24	Lm		
	150mm ditto	4	Lm		
	250 x 250 x 250mm Tee	4	No.		
	250mm mm bend	6	No.		
	150mm ditto	8	No.		
	250 x 150mm reducer	8	No.		
D	**External Weather Louvre**				
	250mm diameter external weather louvre suitable for mounting to the PVC duct complete with galvanised coated wire mesh insect/bird screen.	2	No.		
E	**Electrical Works**				
	Allow for associated Electrical works from the DP switch provided by others including conduiting and wiring to the fan.	1	Item		
F	**Testing and Commissioning**				
	Allow for testing and commissioning of the entire Mechanical Ventillation installations to the satisfaction of the Engineer.	1	Item		
Total Mechanical Carried Forward to GROUND VVIP Collection Page					

Ground VVIP PAVILLION COLLECTION PAGE

ITEM	DESCRIPTION	Amount (Kshs)
1	Total Cost for Ground Floor Installations	-
2	Total Cost for Solar Hot Water Installation	-
3	Total Cost for Portable Fire Extinguishers Installation	-
4	Total Cost for Mechanical Ventillation	-
	Total Cost for ground VVIP Pavillion Installation Carried Forward Pavillion Collection page	-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
4.00	**VVIP FIRST FLOOR**				
4.10	**SANITARY FITTINGS INSTALLATION**				
	Supply, deliver, install, test and commission the following Sanitary appliances complete with all the accessories including all connections to the services, waste, jointing to water supply overflows, supports and all plugging and screwing to walls and floors.				
A	**Back to Wall Water Closet pan**				
	wall Hung WC pan with horizontal Outlet, Heavy duty seat and cover with stainless steel hinges complete with wall fixing brackets, legs and bolts . The Wc suitable for connecting a 40mm FLUSH VALVE.The WC pan to be as "Duravit - D code" or equal and approved.	5	No.		
B	**WC Flush valves**				
	40mm diameter concealed water closet flush valve, chrome plated, back entry, with integral vacuum breaker, non hold open features and non return valve, inlet control stop and wall plate. It shall be complete with flush valve, bent flush pipe and rubber pipe connector. Flush valve to be push lever type. To be as "JAQUAR " or equal and approved.The flush valves shall be supplied with adaptor for connection to the toilet plastic flush pipe.	5	No.		
C	**Countertop Wash hand basin**				
	Countertop washbasin in white colour and of size 560 x 465mm, with one tap hole and complete with pop-up chrome plated waste fitting 32mm chrome, plated bottle trap, chrome plated extension pipe to wall with flange and chrome plated angle valve. The wash basin to be as "Duravit - D code)	4	No.		
D	Single Bowl, Single Drainer stainless steel kitchen sink. Size 1500 x 500mm as manufactured by ASL, complete with chrome plated 40mm waste fittings, plugs, chain stays, overflow, 40mm diameter. chrome plated bottle trap with 75mm deep seal and chain waste fitting.	1	No.		
E	**Basin Mixer tap**				
	Wall mounted lever action wash hand mixer tap as "Vado" or equal and approved.	4	No.		
F	**Hand Dryer**				
	Automatic hand dryer suitable for non-touch ON/OFF switching, complete with electronic infrared proximity switch and sensor-controlled safety switch-off. The hand dryer to be as "Starmix, airstar-T100E" or equal and approved.	2	No.		
G	Wall mounted Soap dispenser with a capacity of about one Litre having a press action Soap release mechanism complete with fixing screws as "Starmix" or equal and approved.	2	No.		
	Total Cost Carried Forward To next Page Page				-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
A	**Mirror** 5mm thick polished plate glass silver backed mirror with bevelled edges, size 2100 x 1500mm, Plugged and screwed to wall with chrome plated dome capped screws. The Mirror shall rest against a layer of 5mm thick foam.	8	M2		
B	**Urinal Bowl** Urinal bowl in white color of size 450 x 685mm with built in spreader and concealed waste trap complete with stainless steel fixing bolts and caps. The urinal bowl to be as "Duravit" or equal and approved.	4	No.		
C	**Electronic Urinal Flush Valve** Automatic electronic urinal flush valve with stainless steel cover 9V Lithium battery with built in transformer including housing for urinal electronic, flush valve for urinal, PE inlet set for urinal universal with shut off valve. It shall complete with service handy for adjustment for detection time and flushing time above flush valve. The Electronic Urinal Flush Valve to be as "Jaquar" or equal and approved.	4	No.		
D	**Urinal Bowl Division** Ceramic urinal bowl divisions separating the above described urinal bowls fixed firmly on the wall. The fittings shall be as "Duravit" or equal and approved.	2	No.		
E	**Coat Hook** Chrome plated coat hook to be fixed with chrome plated concealed screws. To be as "Ideal standard" or equal and approved.	5	No.		
F	**Toilet Roll Holder** Covered chrome plated toilet roll holder size 119 x 80 x 81mm. To be as "Ideal standard" or equal and approved.	5	No.		
G	**Handspray** Handspray fittings with 15mm tap with and flexible tube to handspray complete with wall hook for hanging the spray. To be as "Tywford model SF7270CP" or equal and approved.	2	No.		
H	**Testing and Commissioning** Allow for testing and commissioning of the Sanitary Fittings appliances installation to the satisfaction of the Engineer.	1	Sum		
Total Cost for VVIP First Floor Sanitary Fittings Carried Forward VVIP First floor collection page					

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Supply, deliver install, Test and Commission: PP-R (Polypropylene Random Co-polymer) PN-20 pipes and fittings to DIN 8078 and DIN 16962 with polyfusion welded joints to DVS 2207 of approved manufacturer. Rate (Ksh)s must allow for all Metal/plastic threaded adaptors where required for the connection of sanitary fixtures, valves, sockets, sliding and fixed joints, support raceways, isolating sheaths, elastic materials, expansion arms and bends, crossovers, couplings, clippings, connectors, joints etc. as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed for the proper and satisfactory functioning of the system. The pipes will be pressure tested before the plastering of wall commences and as per the manufacturers recommended testing pressures. The pipes and pipe fittings shall be as " Agro " or approved equivalent and every batch shall be provided with Batch test certificate. NB. Pipes and pipe fittings Must be from the same Manufacturer/ Supplier.				
	PPR PIPING				
A	75mm diameter pipe	6	LM		
B	63mm ditto	12	LM		
C	50mm ditto	6	LM		
D	40mm ditto	18	LM		
E	32mm ditto	12	LM		
E	25mm ditto	30	LM		
	Elbows / Bends				
F	75mm elbows / bends	4	No.		
G	63mm ditto	5	No.		
H	50mm ditto	6	No.		
I	40mm ditto	3	No.		
J	32mm ditto	5	No.		
K	25mm ditto	15	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Equal / Unequal Tees				
A	75 X 75 X 75mm Tee	3	No.		
B	63 X 63 X 50mm Ditto	5	No.		
C	63 x 63 x 25mm ditto	2	No.		
D	50 x 50 x 50mm ditto	3	No.		
E	50 x 50 x 32mm ditto	2	No.		
F	32 x 32 x 32mm ditto	6	No.		
G	32 x 32 x 25mm ditto	8	No.		
H	25 x 25 x 25mm ditto	10	No.		
	Reducers				
I	75 x 63mm reducer	2	No.		
K	63 x 50mm ditto	2	No.		
J	50 x 40mm ditto	2	No.		
L	50 x 32mm ditto	2	No.		
M	50 x 25mm ditto	2	No.		
N	32 x 25mm ditto	9	No.		
	Female/Male BrassThreaded Adaptors				
O	75 x 63mm Brass threaded adaptors	2	No.		
P	75 x 50mm ditto	1	No.		
Q	63 x 50mm ditto	4	No.		
R	50 x 40mm ditto	10	No.		
S	50 x 32mm ditto	5	No.		
T.	40 x 32mm ditto	5	No.		
U	32 x 25mm ditto	9	No.		
V	25 x 20mm ditto	4	No.		
W	25 x 15mm ditto	6	No.		
X	50 x 40mm brass threaded bend	5	No.		
Y	25 x 15mm ditto	12	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
A	**Flexible Connections**				
	15mm diameter x 300mm long high quality flexible connectors complete with backnuts and jointing to gms pipe and sanitary fitting.	6	No		
B	**Angle Valve**				
	15mm diameter chrome plated angle valve with wall flange for connecting sanitary to water supply as "Cobra" or equal and approved.	12	No		
	Valves				
C	75mm diameter approved medium pressure screw down full way non-rising stem wedge gate valve to BS 5154 PN 20 for series B rating, with wheel and head joints to steel tubing and complete with round male threaded transition fittings. The gate valve to be as PEGLER or approved equivalent.	1	No.		
D	63mm ditto	1	No.		
E	50mm ditto	1	No.		
F	25mm ditto	2	No.		
G	20mm ditto	5	No.		
H	20mm diameter Solenoid controlled valve with timer and infrared detection unit for urinal flush pipe control complete with lighting circuit intergration with a 24hr autoflush system.	0	No.		
I	25mm air release valve	1	No.		
	<u>Flushing and Sterilization</u>				
J	Allow for flushing and sterilization of the entire system to the satisfaction of the Engineer.	1	Item		
K	Testing and Commissioning Allow for Testing and Commissioning of the internal plumbing installation to the satisfaction of the Engineer.	1	Sum		
Total Cost for First Floor VVIP Internal Plumbing Carried Forward VVIP First floor Collection Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	First floor Drainage				
	Piping				
A	32mm diameter heavy gauge grey uPVC waste pipe	2	LM		
B	40mm ditto	13	LM		
C	50mm ditto	10	LM		
D	75mm ditto	1	LM		
E	100mm diameter golden brown uPVC waste pipe	24	LM		
	Extra Over uPVC Pipework for fittings				
	Sweep bends				
F	40mm sweep bends	13	No.		
G	50mm ditto	1	No.		
H	100mm ditto	4	No.		
	Elbows/bends 45° (degrees)				
I	40mm bends 45° (degrees)	1	No.		
J	50mm ditto	4	No.		
K	100mm ditto	2	No.		
	Tees				
L	40mm diameter sweep tee	2	No.		
M	50mm diameter sweep tee	1	No.		
	Single Branch				
N	100mm diameter single branch	3	No.		
	Reducers				
O	40 x 32mm diameter reducer	4	No.		
P	75 x 50mm ditto	1	No.		
Q	100 x 50mm ditto	3	No.		
R	100 x 75mm ditto	1	No.		
	Acess plugs				
S	40mm access plug	2	No.		
T	50mm ditto	1	No.		
U	100mm ditto	2	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	WC connectors				
A	100mm WC bend connector	5	No.		
	Traps				
B	32mm plastic bottle P-trap with extension to wall complete with wall flange.	4	No.		
C	50mm urinal P- running trap	1	No.		
D	50mm threaded stainless steel waste fitting	1	No.		
E	100 x 50mm floor trap set complete with stainless steel flush grating	3	No.		
	Hydrostatic testing				
F	Allow for hydrostatic testing of drainage pipework for second floor including provision of all the required sockets and plugs	1	item		
Total Cost for First Floor VVIP Drainage Installation Carried Forward to VVIP First Floor Collection Page					-

VVIP FIRST FLOOR COLLECTION PAGE

ITEM	DESCRIPTION		Amount (Kshs)
1	Total Cost for Sanitary Fittings Installation	5	-
2	Total Cost for Internal Plumbing Installation	9	-
3	Total Cost for Internal Drainage Installation	6	-
Total Cost for VVIP First Floor Carried Forward to pavillion COLLECTION PAGE			-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
4.00	**VVIP SECOND FLOOR**				
4.10	**SANITARY FITTINGS INSTALLATION**				
	Supply, deliver, install, test and commission the following Sanitary appliances				
A	**Wall hung WC pan**				
	Wall hung WC pan white in colour complete with soft Heavy duty seat and cover with stainless steel hinges suitable to use with concealed cistern. The Wc Pan to be as "Duravit D-code " or equal and approved.	5	No.		
B	**Concealed Cistern**				
	Concealed cistern complete with frame for wall hung WC suitable for mounting height of 1140mm, and width 120mm front actuated with dual flush actuator in chrome plated 'matt" finish, including flush pipe and pan connector, water supply connection with angle stop valve, protection cover for service opening and protection cover for flush pipe, fixed with included fastening materilas in "pre- wall" brick. All to be accompanied by a manufacturer's conditional guarantee. The concealed cistern to be as "Geberit Kombfix (article No. 110.350.00.1)" with samba dual flush actuator "(article No. 115.770.46.1)" or equal and approved.	5	No.		
C	**WC Touchless Flush plate**				
	Touchless water closet flush plate as giberrit or approved equivalent	5	No.		
D	**Countertop Wash hand basin**				
	Countertop washbasin in white colour and of size 560 x 465mm, with one tap hole and complete with pop-up chrome plated waste fitting 32mm chrome, plated bottle trap, chrome plated extension pipe to wall with flange and chrome plated angle valve. The wash basin to be as "Duravit - D code)	4	No.		
A	**Wash Hand Basin tap**				
	Automatic touch-free pillar faucet chrome plated comprising touch-free electronic control, 9V Lithium battery and built in transformer and built-in fitters complete with angle valve, 32mm pop up basin waste in chrome plate. The tap to be as "KOHLER" or equal and approved.	4	No.		
F	**Mirror**				
	5mm thick polished plate glass silver backed mirror with bevelled edges, size 2100 x 1500mm, Plugged and screwed to wall with chrome plated dome capped screws. The Mirror shall rest against a layer of 5mm thick foam.	2	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
D	**Hand Dryer** Automatic hand dryer suitable for non-touch ON/OFF switching, complete with electronic infrared proximity switch and sensor-controlled safety switch-off. The hand dryer to be as "Starmix, airstar-T100E" or equal and approved.	2	No.		
E	**Soap dispenser** Wall mounted Soap dispenser with a capacity of about one Litre having a press action Soap release mechanism complete with fixing screws as "Starmix" or equal and approved.	2	No.		
D	**Urinal Bowl** Urinal bowl in white color of size 450 x 685mm with built in spreader and concealed waste trap complete with stainless steel fixing bolts and caps. The urinal bowl to be as "Duravit" or equal and approved.	4	No.		
E	**Electronic Urinal Flush Valve** Automatic electronic urinal flush valve with stainless steel cover 9V Lithium battery with built in transformer including housing for urinal electronic, flush valve for urinal, PE inlet set for urinal universal with shut off valve. It shall complete with service handy for adjustment for detection time and flushing time above flush valve. The Electronic Urinal Flush Valve to be as "Jaquar" or equal and approved.	4	No.		
F	**Urinal Bowl Division** Ceramic urinal bowl divisions separating the above described urinal bowls fixed firmly on the wall. The fittings shall be as "Duravit" or equal and approved.	3	No.		
C	**Coat Hook** Chrome plated coat hook to be fixed with chrome plated concealed screws. To be as "Ideal standard" or equal and approved.	5	No.		
D	**Toilet Roll Holder** Covered chrome plated toilet roll holder size 119 x 80 x 81mm. To be as "Ideal standard" or equal and approved.	5	No.		
E	**Handspray** Handspray fittings with 15mm tap with and flexible tube to handspray complete with wall hook for hanging the spray. To be as "Tywford model SF7270CP" or equal and approved.	2	No.		
G	**Testing and Commissioning** Allow for testing and commissioning of the Sanitary Fittings appliances installation to the satisfaction of the Engineer.	1	Sum		
Total Cost for VVIP Second Floor Sanitary Fittings Carried Forward VVIP Second floor collection page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Supply, deliver install, Test and Commission:				
	PPR PN-20 PIPING				
A	50mm diameter pipe	24	LM		
B	40mm ditto	12	LM		
C	32mm ditto	18	LM		
D	25mm ditto	30	LM		
	Elbows / Bends				
E	50mm elbows / bends	5	No.		
F	40mm ditto	3	No.		
G	32mm ditto	21	No.		
H	25mm ditto	37	No.		
	Equal / Unequal Tees				
I	50 x 50 x 50mm Tee	4	No.		
J	50 x 50 x 32mm ditto	5	No.		
K	32 x 32 x 32mm ditto	2	No.		
L	32 x 32 x 25mm ditto	11	No.		
M	25 x 25 x 25mm ditto	21	No.		
	Reducers				
N	50 x 32mm ditto	5	No.		
O	50 x 25mm ditto	1	No.		
P	32 x 25mm ditto	9	No.		
	Female/Male BrassThreaded Adaptors				
Q	50 x 40mm Brass threaded adaptors	4	No.		
R	50 x 32mm ditto	2	No.		
S	32 x 25mm ditto	6	No.		
T.	25 x 20mm ditto	11	No.		
U	25 x 15mm ditto	15	No.		
V	50 x 40mm brass threaded bend	6	No.		
W	25 x 15mm ditto	21	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
A	**Flexible Connections**				
	15mm diameter x 300mm long high quality flexible connectors complete with backnuts and jointing to gms pipe and sanitary fitting.	8	No		
B	**Angle Valve**				
	15mm diameter chrome plated angle valve with wall flange for connecting sanitary to water supply as "Cobra" or equal and approved.	8	No		
	Valves				
C	40mm diameter approved medium pressure screw down full way non-rising stem wedge gate valve to BS 5154 PN 20 for series B rating, with wheel and head joints to steel tubing and complete with round male threaded transition fittings. The gate valve to be as PEGLER or approved equivalent.	1	No.		
D	25mm ditto	1	No.		
E	20mm ditto	3	No.		
F	20mm air release valve	1	No.		
	Flushing and Sterilization				
G	Allow for flushing and sterilization of the entire system to the satisfaction of the Engineer.	1	Item		
H	**Testing and Commissioning**				
	Allow for Testing and Commissioning of the internal plumbing installation to the satisfaction of the Engineer.	1	Sum		
Total Cost for VVIP Second Floor Internal Plumbing Carried Forward VVIP Second floor Collection Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
4.30	**INTERNAL FOUL DRAINAGE**				
	Supply,deliver and install the following in KEY "Terrain" or equal and approved UPVC heavy guage, Class 41 soil and waste water system. Allow for all the various sizes of adaptors,connectors, sockets,holder bats,clips etc not measured but required for satisfactory function of the system.				
	VVIP Second Floor				
	Piping				
A	32mm diameter heavy gauge grey uPVC waste pipe	2	LM		
B	40mm ditto	13	LM		
C	50mm ditto	10	LM		
D	75mm ditto	1	LM		
E	100mm diameter golden brown uPVC waste pipe	24	LM		
	Extra Over uPVC Pipework for fittings				
	Sweep bends				
F	40mm sweep bends	14	No.		
G	50mm ditto	1	No.		
H	100mm ditto	4	No.		
	Elbows/bends 45o (degrees)				
I	40mm bends 45o (degrees)	1	No.		
J	50mm ditto	4	No.		
K	100mm ditto	2	No.		
	Tees				
L	40mm diameter sweep tee	2	No.		
M	50mm diameter sweep tee	1	No.		
	Single Branch				
N	100mm diameter single branch	2	No.		
	Reducers				
O	40 x 32mm diameter reducer	4	No.		
P	75 x 50mm ditto	1	No.		
Q	100 x 50mm ditto	3	No.		
R	100 x 75mm ditto	1	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Acess plugs				
A	40mm access plug	2	No.		
B	50mm ditto	1	No.		
C	100mm ditto	2	No.		
	WC connectors				
D	100mm WC bend connector	5	No.		
	Traps				
E	32mm plastic bottle P-trap with extension to wall complete with wall flange.	4	No.		
F	50mm urinal P- running trap	1	No.		
G	50mm threaded domed stainless steel urinal outlet waste fitting	1	No.		
H	100 x 50mm floor trap set complete with stainless steel flush grating	3	No.		
	Vent Cowl				
I	100mm diameter vent cowl	5	No.		
	Hydrostatic testing				
J	Allow for hydrostatic testing of drainage pipework for second floor including provision of all the required sockets and plugs	1	item		
Total Cost for VVIP Second Floor Drainage Installation Carried TO VVIP Second Floor Collection Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
4.50	**VVIP SECOND PORTABLE FIRE EXTINGUISHERS**				
	Supply, delivery and installation of portable fire extinguishers including all the necessary mouting accessories together with agent charging, seals and inspection labels. All items shall comply to BS 5423: 1982 and BS 5306 part 3 and shall be postioned as indicated in the contract drawings.				
A	9 litres, water/carbon dioxide gas extinguisher	2	No.		
B	4.5kg carbon dioxide gas extinguisher	2	No.		
C	4.5 kg dry powder extinguisher	2	No.		
D	225 mm diameter gong manual alarm bell	2	No.		
E	Supply and fix signs indicating the words "FIRE POINT" in 80mm high letters	2	No.		
	Testing and Commissioning				
F	Allow for testing and commissioning of the portable fire extinguishers installations to the satisfaction of the Engineer.	1	Item		
	Total Cost for Portable Fire Extinguishers Installation Carried Forward to SECOND FLOOR VVIP Pavillion Collection Page				-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
4.60	**VVIP MECHANICAL VENTILATION**				
	MECHANICAL VENTILLATION				
A	**Extract Fan**				
i)	In-line centrifugal duct fan capable of extracting 0.24m3/S against a static pressure of 200Pa and having sound pressure level of not more than 32dB(A) at 3 metres. Power input 194 watts.The extract fan to be as Expelair XID 250 or equal and approved. The fan to be supplied complete with Speed fan controller, supports, flexible connections and anti-vibration mountings.	1	No		
C	**Extract Register**				
	Extract register of size 300 x 300mm with a volume control damper capable of an air flow rate of 0.12m3/s complete with grille box to suite.	4	No		
D	**Balancing dampers**				
	Control air flow damper of diameter size 250mm with a galvanized steel frame of 80mm deep and blades of 50mm pitch complete with canvas connection and worm drive clips as " FLOWLINE" or equal and approved.	1	No		
B	**Flexible Duct**				
	250mm insulated flexible duct complete with worm drive clips.	1	Lm		
	150mm insulated flexible duct complete with worm drive clips.	1	Lm		
C	**PVC Duct**				
	250mm diameter PVC duct complete	18	Lm		
	150mm ditto	6	Lm		
	250 x 250 x 250mm Tee	4	No.		
	250mm mm bend	4	No.		
	150mm ditto	4	No.		
	250 x 150mm reducer	2	No.		
D	**External Weather Louvre**				
	250mm diameter external weather louvre suitable for mounting to the PVC duct complete with galvanised coated wire mesh insect/bird screen.	1	No.		
E	**Electrical Works**				
	Allow for associated Electrical works from the DP switch provided by others including conduiting and wiring to the fan.	1	Item		
F	**Testing and Commissioning**				
	Allow for testing and commissioning of the entire Mechanical Ventillation installations to the satisfaction of the Engineer.	1	Item		
Total for 2ND FLOOR Mechanical Ventilation CARRIED FORWARD TO VVIP SECOND FLOOR Collection Page					-

VVIP SECOND FLOOR COLLECTION PAGE

ITEM	DESCRIPTION		Amount (Kshs)
1	Total Cost for Sanitary Fittings Installation	5	-
2	Total Cost for Internal Plumbing Installation	9	-
3	Total Cost for Internal Drainage Installation	6	-
4	Total Cost for Portable Fire Extinguishers Installation		-
5	Total Cost for Mechanical Ventillation		-
Total Cost for VVIP Second Floor Carried Forward to pavillion PAVILLION COLLECTION PAGE			-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
3.0	**VIP PAVILLION FIRST FIX**				
3.2	**Supply, deliver install, Test and Commission:** PP-R (Polypropylene Random Co-polymer) PN-20 pipes and fittings to DIN 8078 and DIN 16962 with polyfusion welded joints to DVS 2207 of approved manufacturer. Rate (Ksh)s must allow for all Metal/plastic threaded adaptors where required for the connection of sanitary fixtures, valves, sockets, sliding and fixed joints, support raceways, isolating sheaths, elastic materials, expansion arms and bends, crossovers, couplings, clippings, connectors, joints etc. as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed for the proper and satisfactory functioning of the system. The pipes will be pressure tested before the plastering of wall commences and as per the manufacturers recommended testing pressures. The pipes and pipe fittings shall be as " Agro " or approved equivalent and every batch shall be provided with Batch test certificate. NB. Pipes and pipe fittings Must be from the same Manufacturer/ Supplier.				
	PPR PIPING				
A	75mm diameter pipe	60	LM		
B	63mm ditto	42	LM		
C	50mm ditto	54	LM		
D	40mm ditto	24	LM		
E	32mm ditto	18	LM		
F	25mm ditto	36	LM		
	Elbows / Bends				
G	75mm elbows / bends	12	No.		
H	63mm ditto	4	No.		
I	50mm ditto	40	No.		
J	40mm ditto	8	No.		
K	32mm ditto	12	No.		
L	25mm ditto	50	No.		
Total Cost for Drainage Installation Carried Forward to VIP Pavillion Collection Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Equal / Unequal Tees				
A	75 X 75 X 75mm Tee	6	No.		
B	75 X 75 X 50mm Tee	4	No.		
C	63 X 63 X 50mm Ditto	30	No.		
D	63 x 63 x 25mm ditto	12	No.		
E	50 x 50 x 50mm ditto	20	No.		
F	50 x 50 x 32mm ditto	16	No.		
F	40 x 40 x 32mm ditto	8	No.		
H	32 x 32 x 25mm ditto	12	No.		
I	25 x 25 x 25mm ditto	30	No.		
	Reducers				
J	75 x 63mm reducer	20	No.		
K	75 x 50mm ditto	1	No.		
L	63 x 50mm ditto	16	No.		
M	50 x 40mm ditto	1	No.		
N	50 x 32mm ditto	1	No.		
O	50 x 25mm ditto	1	No.		
P	40 x 32mm ditto	1	No.		
Q	32 x 25mm ditto	24	No.		
Total Cost for Drainage Installation Carried Forward to VIP Pavillion Collection Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Female/Male BrassThreaded Adaptors				
A	75 x 63mm Brass threaded adaptors	10	No.		
B	75 x 50mm ditto	1	No.		
C	75 x 40mm ditto	1	No.		
D	63 x 50mm ditto	28	No.		
E	63 x 40mm ditto	1	No.		
F	50 x 40mm ditto	50	No.		
G	50 x 32mm ditto	1	No.		
H	40 x 32mm ditto	20	No.		
I	32 x 25mm ditto	20	No.		
J	25 x 20mm ditto	50	No.		
K	25 x 15mm ditto	48	No.		
L	50 x 40mm brass threaded bend	24	No.		
N	25 x 15mm ditto	80	No.		
O	**Flexible Connections**				
	15mm diameter x 300mm long high quality flexible connectors complete with backnuts and jointing to gms pipe and sanitary fitting.	0	No		
P	**Angle Valve**				
	15mm diameter chrome plated angle valve with wall flange for connecting sanitary to water supply as "Cobra" or equal and approved.	0	No		
Total Cost for Drainage Installation Carried Forward to VIP Pavillion Collection Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Valves				
A	75mm diameter approved medium pressure screw down full way non-rising stem wedge gate valve to BS 5154 PN 20 for series B rating, with wheel and head joints to steel tubing and complete with round male threaded transition fittings. The gate valve to be as PEGLER or approved equivalent.	2	No.		
B	63mm ditto	3	No.		
C	50mm ditto	15	No.		
D	40mm ditto	2	No.		
E	32mm ditto	8	No.		
F	25mm ditto	12	No.		
G	20mm ditto	28	No.		
H	20mm diameter Solenoid controlled valve with timer and infrared detection unit for urinal flush pipe control complete with lighting circuit intergration with a 24hr autoflush system.	0	No.		
I	25mm air release valve	8	No.		
	Flushing and Sterilization				
J	Allow for flushing and sterilization of the entire system to the satisfaction of the Engineer.	1	Item		
K	**Valve Chamber** Valve chamber of size 450 x 450mm for housing the valves. The chamber shall be masonry built complete with metal plate door and locking mechanism	2	No.		
L	**Testing and Commissioning** Allow for Testing and Commissioning of the internal plumbing installation to the satisfaction of the Engineer.	1	Sum		
Total Cost for Drainage Installation Carried Forward to VIP Pavillion Collection Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
3.3	**INTERNAL FOUL DRAINAGE** Supply,deliver and install the following in KEY "Terrain" or equal and approved UPVC heavy guage, Class 41 soil and waste water system. Allow for all the various sizes of adaptors,connectors, sockets,holder bats,clips etc not measured but required for satisfactory function of the system.				
3.31	**Roof & Second Floor**				
	Piping				
A	100mm diameter heavy gauge grey uPVC waste pipe Extra Over uPVC Pipework for fittings	50	LM		
	Sweep bend				
B	100mm diameter bends	21	No.		
	Single branch				
C	100mm diameter single branch	4	No.		
	Vent Cowl				
D	100mm diameter vent cowl	5	No.		
	Testing and Commissioning				
E	Allow for testing and commissioning of the internal drainage works to the satisfaction of the Engineer	1	item		
Total Cost for Drainage Installation Carried Forward to VIP Pavillion Collection Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
3.32	**First Floor**				
	Piping				
A	32mm diameter heavy gauge grey uPVC waste pipe	4	LM		
B	40mm ditto	15	LM		
C	50mm ditto	17	LM		
D	100mm ditto	24	LM		
	Extra Over uPVC Pipework for fittings				
	Sweep bends				
E	40mm sweep bends	26	No.		
F	50mm ditto	1	No.		
G	100mm ditto	3	No.		
	Sweep bends 45o (degrees)				
H	40mm bends 45o (degrees)	2	No.		
I	50mm ditto	5	No.		
J	100mm ditto	2	No.		
	Tees				
K	40mm diameter sweep tee	5	No.		
L	50mm diameter sweep tee	1	No.		
	Single branch				
M	100mm diameter single branch	9	No.		
	Reducers				
N	40 x32mm diameter reducer	8	No.		
O	100 x 50mm ditto	5	No.		
	Acess plugs				
P	40mm access plug	2	No.		
Q	100mm access plug	2	No.		
	WC connectors				
R	100mm WC bend connector	0	No.		
Total Cost for Drainage Installation Carried Forward to VIP Pavillion Collection Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Traps				
A	32mm plastic bottle P-trap with extension to wall complete with wall flange.	0	No.		
B	50mm diameter urinal running p-trap	0	No.		
C	100 x 50mm floor trap set complete with stainless steel flush grating	4	No.		
D	50mm stainless steel urinal outlet with a dome.	0	No.		
	Vent Cowl				
E	100mm diameter vent cowl	0	No.		
	Testing and Commissioning				
F	Allow for testing and commissioning of the internal drainage works to the satisfaction of the Engineer	1	item		
	Sub-Total for Internal Drainage for 1No. Wing of the Public Pavillion				
	Multiply by 2No. Wings				-
Total Cost for Drainage Installation Carried Forward to VIP Pavillion Collection Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
3.33	**Ground Floor**				
	Piping				
A	32mm diameter heavy gauge grey uPVC waste pipe	8	LM		
B	40mm ditto	27	LM		
C	50mm ditto	19	LM		
E	100mm ditto	20	LM		
F	100mm diameter golden brown uPVC waste pipe	42	LM		
	Extra Over uPVC Pipework for fittings				
	Sweep bends				
G	40mm sweep bends	34	No.		
H	50mm ditto	2	No.		
J	100mm golden brown sweep bends	20	No.		
	Sweep bends 45o (degrees)				
K	40mm bends 45o (degrees)	6	No.		
L	50mm ditto	9	No.		
	Tees				
M	40mm diameter sweep tee	11	No.		
M	50mm diameter sweep tee	6	No.		
	Reducers				
O	40 x32mm diameter reducer	14	No.		
Q	100 x 50mm ditto	1	No.		
	Acess plugs				
R	40mm access plug	2	No.		
R	50mm access plug	6	No.		
Total Cost for Drainage Installation Carried Forward to VIP Pavillion Collection Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	WC connectors				
C	100mm WC bend connector	0	No.		
	Traps				
D	32mm plastic bottle P-trap with extension to wall complete with wall flange.	0	No.		
B	50mm diameter urinal running p-trap	0	No.		
D	50mm stainless steel urinal outlet with a dome.	0	No.		
F	100 x 50mm floor trap set complete with stainless steel flush grating	6	No.		
G	100mm gulley trap in 300 x 300mm masonary chamber complete with cover	5	No.		
	Testing and Commissioning				
I	Allow for testing and commissioning of the internal drainage works to the satisfaction of the Engineer	1	item		
	Sub-Total for Internal Drainage for 1No. Wing of the VIP Pavillion				-
	Multiply by 2No. Wings				-
Total Cost for Drainage Installation Carried Forward to VIP Pavillion Collection Page					-

VIP PAVILLION DRAINAGE INSTALLATION COLLECTION PAGE

ITEM	DESCRIPTION	Amount (Kshs)
1	Total Cost for Roof and Second Floor Drainage Installation	-
2	Total Cost for First Floor Floor Drainage Installation	-
3	Total Cost for Ground Floor Drainage Installation	-
Total Cost Carried Forward To next Page Page		-

VIP PAVILLION COLLECTION PAGE

ITEM	DESCRIPTION	Amount (Kshs)
1	Total Cost for Internal Plumbing Installation	-
2	Total Cost for Internal Drainage Installation	-
Total Cost Carried Forward To next Page Page		-

PAVILLION COLLECTION PAGE

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
1	TOTAL BROUGHT FORWARD FROM VVIP PAVILION GROUND FLOOR				-
2	TOTAL BROUGHT FORWARD FROM VVIP PAVILION FIRST FLOOR				-
3	TOTAL BROUGHT FORWARD FROM VVIP PAVILION SECOND FLOOR				-
4	TOTAL BROUGHT FORWARD FROM VIP PAVILION FIRST FIX				-
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Bill - 5: PUBLIC TOILETS				
5.10	**SANITARY APPLIANCES**				
	Supply, deliver, install, test and commission the following Sanitary appliances complete with all the accessories including all connections to the services, waste, jointing to water supply overflows, supports and all plugging and screwing to walls and floors.				
	Note:				
	The Model indicated is only a guide to the type and quality of fittings. Equivalent and Approved models may be acceptable.				
A	**Squatting Water Closet Pan**				
	An Eastern washdown, squatting WC suite in white vitreous china of approximate size 580 x 450mm, with integral treads and loose trap for fitting at floor level and to be suitable for connecting a 32mm diameter flush valve. All to be as "Lecico Lobna Squatting Pan" or equal and approved.	7	No.		
B	**Back to Wall Water Closet pan**				
	Back to wall WC pan with horizontal Outlet, Heavy duty seat and cover with stainless steel hinges and suitable for connecting a 32mm concealed cistern.The WC pan to be as "Lecico" or equal and approved.	4	No.		
C	**WC Flush valves**				
	40mm diameter concealed water closet flush valve, chrome plated, back entry, with integral vacuum breaker, non hold open features and non return valve, inlet control stop and wall plate. It shall be complete with flush valve, bent flush pipe and rubber pipe connector. Flush valve to be push lever type. To be as "JAQUAR " or equal and approved.The flush valves shall be supplied with adaptor for connection to the toilet plastic flush pipe.	11	No.		
D	**Countertop Wash hand basin**				
	Countertop washbasin in white colour and of size 560 x 465mm, with tap hole and complete with pop-up chrome plated waste fitting 32mm chrome, plated bottle trap, chrome plated extension pipe to wall with flange and chrome plated angle valve. The wash basin to be as "LECICO" or approved Equivalent	8	No.		
E	**Basin push tap**				
	Wall Mounted Chrome plated Bib Cock Auto Closing System non-concussive time delay press action with Built-in Control Cock With Wall Flange as "Jaquar " or equal and approved.	8	No.		
	Soap dispenser				
F	Wall mounted Soap dispenser with a capacity of about one Litre having a press action Soap release mechanism complete with fixing screws as "Starmix"	4	No.		
	Total Cost Carried Forward To next Page Page				-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
A	**Coat Hook**				
	Chrome plated coat hook to be fixed with chrome plated concealed screws. To be as "Ideal standard" or equal and approved.	11	No.		
B	**Mirror**				
i)	5mm thick polished plate glass silver backed mirror with bevelled edges, size 2400 x 1000mm, Plugged and screwed to wall with chrome plated dome capped screws. The Mirror shall rest against a layer of 5mm	1	No.		
ii)	ditto but size 1800mm x 1000mm	1	No.		
C	**Slab Urinal**				
	Floor standing Slab Urinal trough of dimensions 5000mm long and 1200mm high to BS 4880:1973 manufactured from 1.2mm thick, grade 316L stainless steel conforming to BS EN 10088:Part 2:2005 complete with: - 50mm doomed strainer Waste Outlet fitting, 13.6 litre auto cistern and cover, auto syphon and petcock , Vandal resistance Stainless Steel Downpipe, Sparge pipe and spreader, Fixing Screws , - any other necessary accessory for the proper functioning of the Urinal Urinal shall be as " Deveron Armitage sharks"	1	No.		
E	**Toilet Roll Holder**				
	Covered chrome plated toilet roll holder size 119 x 80 x 81mm. To be as "Ideal standard" or equal and	11	No.		
F	**Water Drinking Fountain**				
	310 x 258 x 280mm satin polish finish drinking fountain made of 1.2mm thick stainless steel type 304 to BS 1449 PT2 1083 and EN 14301 to EN10088-2 complete with fitings/water bubbler, waste, mounting brackets and earthing lug.	2	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
A	**Handspray**				
	Handspray fittings with 15mm tap with and flexible tube to handspray complete with wall hook for hanging the spray. To be as "Tywford model SF7270CP" or equal and approved.	5	No.		
B	**Disabled WC Facility**				
	Disabled toilet complete assembly comprising of :- i) WC bowl with horizontal outlet. ii) Cistern,fittings,cistern cover clips and standard lever. Cistern to have side inlet and overflow. iii) Seat ring 25mm and hinge, no cover. iv) Germshield. v) Washbasin with one tap hole, no overflow and no chainstay. Wash basin to complete with :- i) Wall hangers (pair) ii) Grid waste iii) Lever operated pillar tap 3) 5 No. 600mm long grab rail 4) Hinged support rail with toilet roll holder 5) Handspray 6) Plate glass mirror size 400 x 900mm The disabled toilet assembly shall be as **" Lecico Doc.M"** or equal and approved.	2	No.		
C	**Testing and Commissioning**				
	Allow for Testing and Commissioning of the whole Sanitary Fittings appliances installation to the satisfaction of the Engineer.	1	Sum		
Total Cost for Sanitary Fittings Carried Forward to Public Toilets Collection Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	PPR-PN20 Piping: Appliances distribution PP-R (Polypropylene Random Co-polymer) PN-20 pipes and fittings to DIN 8078 and DIN 16962 with polyfusion welded joints to DVS 2207 of approved manufacturer. Rate (Ksh)s must allow for all Metal/plastic threaded adaptors where required for the connection of sanitary fixtures, valves, sockets, sliding and fixed joints, support raceways, isolating sheaths, elastic materials, expansion arms and bends, crossovers, couplings, clippings, connectors, joints etc. as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed for the proper and satisfactory functioning of the system. The pipes will be pressure tested before the plastering of wall commences and as per the manufacturers recommended testing pressures. The pipes and pipe fittings shall be as " Agro " or approved equivalent and every batch shall be provided with Batch test certificate. NB. Pipes and pipe fittings Must be from the same Manufacturer/ Supplier.				
	PPR Piping				
A	75mm diameter pipe	12	LM		
B	63mm ditto	15	LM		
C	50mm ditto	18	LM		
J	32mm ditto	6	No.		
F	25mm ditto	20	LM		
	Elbows / Bends				
G	75mm elbows / bends	3	No.		
G	63mm elbows / bends	3	No.		
H	50mm elbows / bends	15	No.		
J	32mm ditto	6	No.		
K	25mm ditto	10	No.		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Equal / Unequal Tees				
A	75 x 75 x 63mm Tee	5	No.		
B	63 x 63 x 63mm Tee	3	No.		
B	63 x 63 x 50mm Tee	8	No.		
C	50 x 50 x 50mm Tee	2	No.		
G	32 x 32 x 25mm ditto	6	No.		
H	25 x 25 x 25mm ditto	4	No.		
	Reducers				
J	63 x 50mm reducer	6	No.		
L	50 x 32mm reducer	3	No.		
L	50 x 25mm reducer	3	No.		
M	32 x 25mm ditto	4	No.		
	Female/Male BrassThreaded Adaptors				
P	75 x 63mm brass threaded adaptors	4	No.		
P	63 x 50mm brass threaded adaptors	15	No.		
Q	50mm x 40mm brass threaded adaptors	18	No.		
R	25 x 20mm brass threaded adaptors	12	No.		
S	25 x 15mm brass threaded adaptors	5	No.		
V	**Flexible Connections**				
	15mm diameter x 300mm long high quality flexible connectors complete with backnuts and jointing to gms pipe and sanitary fitting.	5	No		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	
	Total Cost Brought Forward from Previous Page				-
A	**Angle Valve** 15mm diameter chrome plated angle valve with wall flange for connecting sanitary to water supply as "Cobra" or equal and approved.	5	No		
	Valves				
B	63mm diameter approved medium pressure screw down full way non-rising stem wedge gate valve to BS 5154 PN 20 for series B rating, with wheel and head joints to steel tubing and complete with round male threaded transition fittings. The gate valve to be as PEGLER or approved equivalent.	2	No.		
C	50mm ditto	6	No.		
E	25mm ditto	1	No.		
F	20mm ditto	4	No.		
H	20mm air release valve	1	No.		
H	20mm diameter Solenoid controlled valve with timer and infrared detection unit for urinal flush pipe control complete with lighting circuit intergration with a 24hr autoflush system.	1	No.		
	Flushing and Sterilization				
I	Allow for flushing and sterilization of the entire system to the satisfaction of the Engineer.	1	Item		
J	**Valve Chamber** Valve chamber of size 450 x 450mm for housing the valves. The chamber shall be masonry built complete with metal plate door and locking mechanism	2	No.		
K	**Testing and Commissioning** Allow for Testing and Commissioning of the internal plumbing installation to the satisfaction of the Engineer.	1	Sum		
Total Cost for internal plumbing forward to public Toilets collection page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	INTERNAL FOUL DRAINAGE				
A	32mm diameter heavy gauge grey uPVC waste pipe	10	LM		
B	40mm ditto	20	LM		
C	50mm ditto	6	LM		
E	100mm ditto	14	LM		
F	100mm diameter golden brown uPVC waste pipe	60	LM		
	Extra Over uPVC Pipework for fittings				
	Sweep bends				
G	40mm sweep bends	18	No.		
I	100mm golden brown sweep bends	18	No.		
J	40mm bends 45o (degrees)	5	No.		
K	50mm bends 45o (degrees)	5	No.		
	Tees				
L	40mm diameter sweep tee	9	No.		
M	50mm diameter sweep tee	5	No.		
	Reducers				
N	40 x32mm diameter reducer	9	No.		
O	100 x 50mm ditto	2	No.		
	Acess plugs				
P	40mm access plug	2	No.		
Q	50mm access plug	3	No.		
	WC connectors				
R	100mm WC bend connector	7	No.		
S	100mm P-trap squating WC connector	5	No.		
	Traps				
T	32mm plastic bottle P-trap with extension to wall complete with wall flange.	8	No.		
U	50mm urinal P- running trap	1	No.		
V	50mm threaded domed stainless steel urinal outlet waste fitting	1	No.		
W	100 x 50mm floor trap set complete with stainless steel flush grating	3	No.		
X	100mm gulley trap in 300 x 300mm masonary chamber complete with cover	3	No.		
	Vent Cowl				
Y	100mm diameter vent cowl	2	No.		
Z	**Testing and Commissioning** Allow for testing and commissioning of the internal drainage works to the satisfaction of the Engineer	1	item		
Total Cost Carried Forward To next Page Page					

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
4.5	**PORTABLE FIRE EXTINGUISHERS**				
	Supply, delivery and installation of portable fire extinguishers including all the necessary mouting accessories together with agent charging, seals and inspection labels. All items shall comply to BS 5423: 1982 and BS 5306 part 3 and shall be postioned as indicated in the contract drawings.				
A	9 litres, water/carbon dioxide gas extinguisher	1	No.		
B	4.5kg carbon dioxide gas extinguisher	1	No.		
C	4.5 kg dry powder extinguisher	1	No.		
D	225 mm diameter gong manual alarm bell	1	No.		
E	Supply and fix signs indicating the words "FIRE POINT" in 80mm high letters	1	No.		
	Testing and Commissioning				
F	Allow for testing and commissioning of the portable fire extinguishers installations to the satisfaction of the Engineer.	1	Item		
Total Cost Carried Forward To next Page Page					

PUBLIC TOILETS COLLECTION PAGE

ITEM	DESCRIPTION	Amount (Kshs)
1	Total Cost for Sanitary Fittings Installation	-
2	Total Cost for Internal Plumbing Installation	-
3	Total Cost for Internal Drainage Installation	-
4	Total Cost for Portable Fire Extinguishers Installation	-
	sub -Total for 1no. Public toilet	-
	MULTIPLY BY 2 NO. ABLUTION BLOCKS	-
Total Cost for Public Toilets Installation Carried Forward to Price Summary Page		-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
6.00	**GATE HOUSE INSTALLATION WORKS**				
6.10	SANITARY FITTINGS AND ACCESSORIES				
A	**Squatting Water Closet Pan** An Eastern washdown, squatting WC suite in white vitreous china of approximate size 580 x 450mm, with integral treads and loose trap for fitting at floor level and to be complete with 7.5litres high level ceramic cistern with chain pull. The cistern to be complete with syphon, 15mm side inlet ball valve, 20mm side overflow, plastic flushpipe and clip, inlet connection and reversible chain pull and cistern supports. All to be as "Lecico Lobna Squatting Pan" or equal and approved.	1			
B	**Wash Basin** Wall Hang wash hand basin size 550 x 450m with one centre tap hole and chain stay hole, 32mm diameter chrome plated pop up chain waste, concealed wall bracket and plastic bottle trap (32mm 'P' trap) with 75mm seal. The wash hand basin to be as "Ideal Standard Space" or equal and approved.	1			
C	**Wash Basin PushTap** Chrome plated non-conculsive time delay press action pillar tap as "Docol" or equal and approved.	1			
D	**Soap dispenser** Wall mounted Soap dispenser with a capacity of about one Litre having a press action Soap release mechanism complete with fixing screws as "Starmix" or equal and approved.	1			
E	**Mirror** 3mm thick polished plate glass silver backed mirror with beveled edges, size 610 x 610mm,Plugged and screwed to wall with chrome plated dome capped screws. The Mirror shall rest against a layer of 5mm thick foam.	1			
F	**Coat Hook** Chrome plated coat hook to be fixed with chrome plated concealed screws. To be as "Ideal standard" or equal and approved.	1			
G	**Handspray** Handspray fittings with 15mm tap with and flexible tube to handspray complete with wall hook for hanging the spray. To be as "Tywford model SF7270CP" or equal and approved.	1			
H	**Toilet Roll Holder** Covered chrome plated toilet roll holder size 119 x 80 x 81mm. To be as "Ideal standard" or equal and approved.	1			
i)	**Shower Fittings** Concealed shower fittings consisting of 15mm stop cock, gms shower and instant water heater	1			
ii)	15mm bib tap	1			
iii)	**Soap Dish** Semi recessed built in soap tray in Vitreous China of size: 305 x 150mm in approved colour as Twyford VC 9312 WH or equal and approved.	1			
I	**Testing and Commissioning** Allow for Testing and Commissioning of the whole Sanitary Fittings appliances installation to the satisfaction of the	1			
Total Cost for sanitary fittngs Carried Forward To Gate House collection Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
6.20	**PLUMBING INSTALLATION WORK**				
	Supply, deliver and install PP-R (Polypropylene Random Co- polymer) PN-20 pipes and fittings.The pipes shall be from an approved manufacturer.				
	Piping				
A	25mm diameter pipe	12			
	Extra over PPR Pipework				
	Elbows/bends				
C	25mm bend	9			
	Equal/Unequal tees				
E	25 x 25 x 25mm tee	2			
	Reducers				
F	20 x 15mm threaded reducer	3			
	Male/Female brass threaded adaptor				
G	25 x 20mm male/female threaded adaptor	4			
H	25 x 15mm male/female threaded bend	3			
	Unions				
I	25mm diameter union	1			
	Flexible Connections				
J	15mm diameter x 300mm long high quality flexible connectors complete with backnuts and jointing to gms pipe and sanitary fitting.	2			
	Angle Valve				
K	15mm diameter chrome plated angle valve with wall flange for connecting sanitary to water supply as "Cobra" or equal and approved.	3			
	Isolating valves				
L	20mm diameter approved medium pressure screw down full way non-rising stem wedge gate valve. The gate valve to be as PEGLER or approved equivalent.	1			
I	**Testing and Commissioning**				
	Allow for Testing and Commissioning of the plumbing installation to the satisfaction of the Engineer.	1			
	Total Cost for plumbing installation Carried Forward To Gate House collection Page				-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
6.30	**FOUL DRAINAGE** Supply, deliver and install the following in key "Terrain" or equal and approved uPVC Heavy gauge soil and waste system. Allow for all the various sizes of adaptor, connectors, sockets, holderbats, clips etc not measured but required for the satisfactory functioning of the system.				
A	32mm diameter heavy duty grey uPVC pipe	2			
B	100mm ditto	4			
C	100mm golden brown	11			
	EXTRA OVER UPVC PIPEWORK FOR FITTINGS				
D	32mm sweep bend	3			
E	100mm ditto	2			
F	100mm vent cowl	1			
G	100mm bend WC connector	1			
H	32mm bottle 'p' trap	1			
	Gulley Trap Gully trap comprising of 100mm diameter golden brown uPVC gully piece, 100mm diameter uPVC trap spigot outlet with screws and washers, and 300 x 300mm masonry gully trap chamber with mild steel plate and a heavy duty iron cover.	1			
6.4	**FIRE PROTECTION: Portable Fire Protection Equipment** Supply, delivery and installation of portable fire protection equipment with initial fill complete with all the necessary mounting accessories.				
I	4.5kg carbon dioxide gas extinguisher	1			
J	4.5 kg dry powder extinguisher	1			
K	**Testing and Commissioning** Allow for testing and commissioning of the entire gate house installation to the satisfaction of the Engineer.	1			
Total Cost for Drainage and Portable Fire Extinguishers Installation Carried Forward Gate House Collection Page					-

GATE HOUSE COLLECTION PAGE

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
1	Total Cost for Sanitary Fittings Installation				-
2	Total Cost for Internal Plumbing Installation				-
3	Total Cost for Internal Drainage and Fire Protection Installation				-
	SUB-TOTAL FOR 1NO. GATE HOUSE				-
	MULTIPLY BY 5NO. THE GATE HOUSES				-
Total Cost for Gate House installation Carried Forward To summary page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	BORE HOLE DRILLING AND EQUIPPING				
A	Mobilization/ demobilization of drilling unit, equipment materials, personnel and all other required supplies.	1	Item		
B	Drilling 200mm diameter borehole from 0-100m below surface.	100	LM		
C	Drilling from 100 – 200m	100	LM		
D	Drilling from 200 – 300m	56	LM		
E	Supply and installation of 152mm diameter plain steel casing.	200	LM		
F	Supply and installation of 152mm diameter slotted steel casing	100	LM		
G	Supply and installation of filter gravel pack	10	Ton		
H	Development works	12	Hrs		
I	Test pumping to ascertain borehole yield for at least 24 hours including installation and withdrawal of pumping unit and recovery measurements.	1	Item		
J	Construction of concrete plinth size 1.5m x 1.5m x 600mm around well head.	1	No		
K	152mm diameter borehole capping	1	No		
L	Allow for all costs involved in providing water for all requirements of the contractor drilling field camp etc.	1	Item		
M	Water chemical and Bacteriological Analysis and borehole completion report.	1	Item		
N	Geological logging and geological survey expenses.	1	Item		
	Borehole Pump				
O	Supply and install centrifugal borehole pump, continuously rated and capable of pumping 10m³/hr of water against a total head of 280m. The Pump to be as "Grundfos SP17-27" or equal and approved.	1	No		
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Pump control and Control Panel				
A	Supply and install a control panel to be mounted off the wall. The control panel shall be water tight with corrosion resistant from hinged lockable door metal enclosure and have Merlin Gerin switch-gear and Telemechanique control gear. The control panel shall be supplied and installed complete with the following components fully wired and labeled. - 1No. 32A 3-pole isolator complete with extended rotary handle as main incomer. - 0 – 500V voltmeter complete with fuse protection and selector switch - Under/ over voltage phase failure protection relay complete with fuse protection. - 0-10-30A ammeter for the bore hole pump 1No. 32A 3-pole MCB for the pump -1No. 1A 3-POL3 MCB type for the motor complete with auxiliary relay for the pump - 1No. 45W 1-phase 240V AC DOL starter complete with thermal overload relay for doser pump - Dry run alarm for the 45 watt chemical doser pump, incorporating a float switch in the doser level regulator, to trigger the alarm when chemical level is below minimum level. - 2 No. reset push buttons. - Set of on/ trip indictors. - Auto/off/hand selector switches for the two pumps. - Low level indicator lamp for chlorine doser. - Set of terminals for low level regulator connections - Set of terminal for high level float switch connections - Set of terminal for motor connections - 1No. level regulator switch to be installed in the low level water storage tank to stop the pump when tank is full. The borehole pump will be operated by a 3-position auto-off- manual selector switch. A 3-position auto-off manual selector switch operates the 45 watt doser pump. In the auto mode the pump can only be operational if the borehole pump is running. In the manual mode the pump runs independently. The pump will be protected against dry-run by a low level regulator. The operation of the two pumps shall be such that the 45watt-chlorine doser pump will only pump if the main borehole pump is operational. The hand section will override this but not the low-level regulator for the doser.	1	No		-
Total Cost Carried Forward To next Page Page					-

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				-
	Chlorine Dosing Pump				
A	Supply and install a positive displacement diaphragm type chlorine dosing pump with fixed feed rate of 15 litres per hour. The pump shall be a single-phase 240V 45watt, rated for a maximum line pressure of 4 bar. The pump to have a heavy duty polypropylene pump head designed to resist fouling and airlock maintenance free operation. The pump shall be supplied complete with a foot valve, foot valve strainer, a clear section hose, 10 meter delivery hose complete with delivery injector valve to be fitted to 15mm BSP female threads. The pump to be as "Grundfos Alldos model DDC 15-4" chemical dosage pump as manufactured by "Grundfos" or equal and approved.	1	No		
	Chemical Solution Tank				
B	Supply and install chemical solution tank of Capacity 170litres and dimensions 500mm diameter x 1150mm high made from robust, corrosion resistant fibre glass. The tank to be installed free standing in the pump house. The tank to be supplied with all other necessary accessories. Tank to be as model **DAYLIFF T170L** as manufactured by "Davis and Shirtlift ltd" or equal and approved.	1	No		
C	Standard sanitiser comprising of calcium Hypo-chloride 65% chlorine compound.	45	Kg		
D	6mm² 4-core PVC flat submersible electric cable. Waterproof.	350	LM		
E	2.5mm² 4-core PVC round hardened PVC electrode cables waterproof.	700	LM		
F	2.5mm² 4-core PVC/SWA/PVC cable from control panel to water tanks.	100	LM		
G	25mm diameter heavy gauge PVC duct.	350	LM		
H	Excavate trench of dimensions 300mm x 500mm to invert to lay cables. The laid cables to be covered with 50mm thick layer of fine soil covered with tiles as “Hatari” then back fill and ram and dispose of excess.	50	LM		
I	Electrode pair	1	No		
J	Level regulator complete with mounting box	2	No		
K	Supply and install a 150mm diameter strong steel borehole cover plate with dipper access, drop cable/surface junction box and pump outlet.	1	No		
L	Supply and install galvanised steel lockable borehole protection cover size 750 x 750 x 400mm complete with 2No. heavy duty rustless padlocks.	1	No		
Total Cost Carried Forward To next Page Page					

ITEM	DESCRIPTION	QTY	UNIT	RATE	Amount (Kshs)
	Total Cost Brought Forward from Previous Page				
A	Supply and install 40mm diameter PVC heavy gauge observation pip	300	LM		
B	Supply and install high quality pressure gauge as Kent or equivalent range 0-7kgf/cm² complete with accessories for mounting on G1 pipe.	1	No		
C	Supply and install single orifice air valve, complete with pipe mounting accessories.	1	No		
	Galvanised Mild Steel pipework and fittings:-				
D	Supply and install 65mm diameter rising main galvanised mild steel pipes class 'C' complying to BS 1387 with screwed and socket joints to BS 143 and 1256 and of approved manufacturer with galvanised to BS 729. Tenders must allow in their pipework prices for all the couplings, unions, connectors, joints, reducers, sockets etc as required in running lengths of pipework and also where necessary for pipe fixing clips holder bats plugged and screwed.	350	LM		
E	65mm diameter gate valve as 'pegler' or approved equaivalent	1	No.		
F	65mm diameter non-return valve as "pegler" or approved equaivalent	1	No.		
G	65mm diameter equal tee	1	No.		
H	65mm diameter GI bend	5	No		
I	65mm single flanged nipple	2	No		
J	65mm water meter as "Sensus" or equal and approved	1	No		
K	Allow for sterilization	1	Item		
L	Allow for application and acquisition of permits for drilling from relevant authorities (Ministry of Water, Nema and Water Resource Management Authority (WRMA)) before commencing the works. (Note: No payments to be made before the permit is acquired and submitted to the Client)	1	Item		
M	Any other item necessary to complete the works (please specify)	1	Item		
Total Cost Carried Forward To next Page Page					

PRICE SUMMARY PAGE

ITEM	DESCRIPTION	Amount (Kshs)
1	Total for Preliminaries and General items ……..……	
2	Total for Water Reticulation, Booster pump and High Level Water Storage Tank installation	
3	Total for Field Irrigation	
4	Total for Pavillion Installation…….……...…….	
5	Total for Public Toilets	
6	Total for Gate	
7	Total for Borehole drilling & Equipping..……	
8	**Sub-Total for the VVIP Terrace……...……...……**	-
9	Allow for a Provisional sum of Kenya shillings One Million Nine Hundred Thirteen Thousand Eight Hundred Forty shillings (1,913,840.00) only for contingency	**1,913,840.00**
TOTAL AMOUNT FOR MECHANICAL SERVICES WORKS CARRIED FORWARD TO FORM OF TENDER		

Amount in words…….……

Tender's name and stamp:
Witness name in full:
Signature…….…….

GRAND SUMMARY

PROPOSED COMPLETION OF REHABILITATION AND MODERNIZATION OF KENYATTA STADIUM PHASE 1A - TRANS NZOIA COUNTY.

GRAND SUMMARY

ITEM	DESCRIPTION	CONTRACT AMOUNT
1.0	PARTICULAR PRELIMINARIES	
2.0	GENERAL PRELIMINARIES	
3.0	VVIP PAVILION (1 NO.)	
4.0	VIP PAVILION (2 NO.)	
5.0	PUBLIC TERRACE - EASTERN STAND (1 NO.)	
6.0	PUBLIC TERRACES - NORTHERN STAND (3 NO.)	
7.0	PUBLIC TERRACES - SOUTHERN STAND (3 NO.)	
8.0	ABLUTION BLOCKS (2 NO.)	
9.0	GATE HOUSES (3 NO.)	
10.0	MAIN ARENA	
11.0	CIVIL WORKS (PHASE 1A RELATED)	
12.0	DAYWORKS AND SCHEDULE OF RATES	
13.0	PRIME COST AND PROVISIONAL SUMS	
	SUB-TOTAL	
	ADD PUBLIC PROCUREMENT CBL @0.03% OF SUB-TOTAL	
	TOTAL TO FORM OF TENDER	

COUNTY GOVERNMENT OF TRANS NZOIA

THE PROPOSED REHABILITATION AND MODERNIZATION OF KENYATTA STADIUM - PHASE 1A COMPLETION.

Tender No. ……...2026/2027.

TECHNICAL SPECIFICATIONS

Architects
COUNTY ARCHITECT
PUBLIC WORKS
BOX 4211 30200 KITALE

Quantity Surveyors
COUNTY QS
PUBLIC WORKS
BOX 4211 30200 KITALE

Structural Engineers
COUNTY STRUCTURAL ENGINEER
PUBLIC WORKS
BOX 4211 30200 KITALE

Electrical & Mechanical Engineers
COUNTY MECH & ELEC ENGINEER
PUBLIC WORKS
BOX 4211 30200 KITALE

ISSUED BY;
CHIEF OFFICER,
DEPARTMENT OF PUBLIC WORKS AND ENERGY, TRANS-NZOIA COUNTY,
P.O. BOX 4211-30200,
KITALE

October 2026

SECTION NO. 2

PREAMBLES

GENERAL SPECIFICATION

A. The General Specification as prepared by **Works officer-Department of Public works and energy, Kitale is** issued to the Contractor with the Bills of Quantities.

B. All items in the Bills of Quantities shall conform to the full Specification for similar items in the General Specification.

C. Where the wording "as described" is included in the Bills of Quantities this wording shall be construed as either an abbreviation of a detailed description for a similar item in the General Specification or as a reference to the preambles.

D. Where detailed descriptions in the Bills of Quantities differ in any respect to similar descriptions in the General Specifications, then such descriptions in the Bills of Quantities shall be deemed to take precedence.

EXCAVATION

E. Shall be to the widths as provided for by Standard Method of Measurement for building works of East Africa and depths indicated on the drawings or to such lesser or greater depth as the Architect may deem necessary and so instruct the contractor in order to obtain satisfactory foundations.

STARTING LEVEL

F. Unless otherwise described, the starting level of all excavations has been measured from the level remaining after completion of reduced level excavation, generally taken as the underside of 200 surface strip.

CLASSIFICATION OF EXCAVATED MATERIAL

CLASS 1 ROCK OR HARD MATERIAL

G. This shall be material which cannot be removed except by blasting or by ripping and which can not be ripped to an average rip of more than 300mm by track type crawler tractor in good working order rated less than 335 Hp fly wheel power with an operating weight of less than 37.2 tons operated by a hydraulic simple line heavy duty ripper and operated to the satisfaction of the Engineer.

Boulders greater than 0.5cm; when their nature and size is such that they cannot be removed without recourse to one or more of the methods described above shall also be in class one.

Where the boulders constitute 50% or more of a particular part of the excavation, such part shall be considered as class 1 material throughout.

A. CLASS 2 NORMAL OR SOFT MATERIAL

This class shall constitute all materials which can be removed without recourse to the methods described for class 1 above, and/or class 3 below.

B. CLASS 3 COMPACTED GRAVEL OR DECOMPOSED ROCK

This class shall constitute all materials such as consolidated murram or gravel decomposed or stratified rock, stones and boulders less than 0.5m, harder than class 2, but which can be excavated by ripping or which in confined spaces, requires excavation by hand using compressor tools.

C. Excavation Work

Excavation work is measured net as before digging and the Contractor must allow for increases in bulk after digging.

D. Filling

Filling is measured net after consolidation. Filling obtained from surplus excavated materials is to be free from all weeds, roots, vegetables soil or other unsuitable materials and is to be filled in layers each of not more than 225mm finished thickness. Each layer shall be well wetted and consolidated as described thereafter.

E. No Borrow Pits

No borrow pits will be allowed to be opened on the site unless with written approval from the Architect.

F. Removal of Surplus Material

All surplus excavated material, and all rubbish, is to be carried away from the site and the Contractor shall find his own dump and pay all charges unless contrary instructions are issued by the Architect.

G. Foundations not to be covered

No excavations or foundations work shall be filled in or covered up until all measurements necessary for the adjustment of variations have been made by the Quantity Surveyor.

H. Hardcore Filling

Hardcore for filling under floors, etc, shall, be hard broken quarry waste to the approval of the Architect broken to pass not greater than a 150mm ring or to be 75% of the finished thickness of the layers being compacted whichever is the lesser and graded so that it can be easily and thoroughly compacted by rolling. The filling is to be laid in layers each of a consolidated thickness not exceeding 225mm and well watered and rolled with a vibrating roller where rolling is impossible, compaction shall be by hand or mechanical tampers.

The top surface of the hardcore shall be levelled or graded to falls as required and blinded with similar material broken to 25mm gauge and surfaced with 25mm layer of stone dust, well watered and rolled to receive concrete or paving.

CONCRETE WORK

A. NOTES CONCERNING MEASUREMENT AND PRICING:

The Contractor must allow for all costs incurred during the progress of the contract for complying with the provisions concerning the preparation and use of graded mixes.

Prices for concrete shall include for mixing and depositing as described or indicated and for hoisting and depositing at the various levels required throughout the building, and shall also include for forming or hacking a satisfactory key for all faces receiving asphalt and plaster work. Prices for slabs shall also include for levelling off the surface as described under "Compaction" and all temporary formwork to form construction joints at bay edges.

Prices for reinforced concrete shall, in addition, include for filling into, between or on formwork, and thoroughly compacting between and around rods or fabric reinforcement and for forming all additional construction joints between varying mixes. Where described as `vibrated', prices must include for fully vibrating as described.

Prices for formwork shall include for extra material at joints, extra labour and waste for narrow widths, small quantities, splayed edges, notchings, etc., and for fixing at the various levels including battens, struts and supports for bolting, wedging, easing, striking and removal. Prices for linear items such as boxings, shall include for angles and ends.

Prices for steel rod reinforcement shall include for cutting to lengths and all labour in bending and cranking, forming hooked ends, handling, hoistings and fixing in position and for providing all necessary tying wire and supports. Prices for fabric reinforcement shall include for all straight cutting and waste, handling, hoisting fixing in position, prodding all necessary tying wire and supports and all extra material laps.

Prices of all precast concrete shall include for all moulds, finishing as described, handling reinforcement, hoisting and fixing at the required levels, bedding, jointing and pointing in cement and sand (1:5) mortar also for casting or cutting to the exact lengths required and any waste resulting from such cutting.

B. ARCHITECT/ENGINEER

For the purpose of the concrete structure, the Structural Engineer shall be deemed invested with the duties and be the representative of the Architect in all aspects regarding instructions and supervision.

CONCRETE WORK

C. CODE OF PRACTICE

All workmanship, materials, tests and performance in connection with the reinforced concrete work are to be in conformity with the latest edition of the British Standard Code of Practice (C.P.114 for "The Structural Use of Reinforced Concrete in Buildings") where not inconsistent with these preambles.

A. SUPERVISION

A competent person approved by the Engineer shall be employed by the Contractor whose duty will be to supervise all stages in the preparation and placing of the concrete. All cubes shall be made and Site tests carried out under his direct supervision, in consultation with the Engineer.

B. CONTRACTOR'S PLANT, EQUIPMENT AND CONSTRUCTION PROCEDURES

Not less than 30 days prior to the installation of the Contractor's plant and equipment for processing, holding transporting, storing and proportioning ingredients, and for mixing, transporting and placing

concrete, the Contractor shall submit drawings for approval by the Engineer, showing proposed general plant arrangement, together with a general description of the equipment he proposes to use.

After completion of installation, the operation of the plant and equipment shall be subject to the approval of the Engineer.

Where these Preambles, the Bills of Quantities or the Drawings require specific procedures to be followed, such requirements are not to be construed as prohibiting the use by the Contractor of alternative procedures if it can be demonstrated to the satisfaction of the Engineer that equal results will be obtained by the use of such alternatives.

Approval of plant and equipment or their operation, or of any construction procedure, shall not operate to waive or modify any provision or requirement contained in these Preambles governing the quality of the materials of the finished work.

C. LEVELS AND FOUNDATIONS

The foundations of the Works shall be carried down to depths as directed by the Engineer and they must be cut as nearly to the size of the concrete as possible and the vacant spaces between the concrete and the solid ground, except where otherwise shown, must be carefully filled in as directed by the Engineer.

All temporary timbering shall be removed but should any timber be left in or should any other work be done beyond that specified; it will be at the Contractor's own cost.

D. TOLERANCES

On all setting out dimensions of six metres and over a maximum non-accumulative tolerance of plus or minus 6mm will be allowed. On all setting out dimensions under six metres a maximum non-accumulative tolerance of plus or minus 3mm will be allowed. On the cross sectional dimensions of structural members, unless otherwise required by the Drawings, a maximum tolerance of plus or minus 3mm will be permitted. The top surface of concrete floor slabs and beams shall be within 6mm of the normal level and line shown on the Drawings.

Columns shall be truly plumb and non-accumulative tolerance of 3mm in each storey and not more than 12mm out of plumb in their full height will be permitted. The Contractor shall be responsible for the cost of all corrective measures required by the Engineer to rectify work which is not constructed within the tolerances set out above.

A. MATERIALS GENERALLY

All materials which have been damaged, contaminated or have deteriorated or do not comply in any way with the requirements of these Preambles shall be rejected and shall be removed immediately from the Site at the Contractor's own expense. No materials shall be stored or stacked on suspended floors without the Engineer's prior written approval.

B. CEMENT

Cement unless otherwise specified shall be Portland Cement of a brand approved by the Engineer and shall comply with the requirements of B.S. 12, with the exceptions that it may contain reactive Volcanic ash of not more than 10 per cent of the total weight and the quantity of insoluble residue permitted in B.S. 12 may be exceeded on this account only. A Manufacturer's Certificate of Test in accordance with B.S. 12 shall be supplied for each consignment delivered to the Site.

Cement may be delivered to the Site either in bags or in bulk if delivered in bags, each bag shall be properly sealed and marked with the manufacturer's name and on the Site is to be stored in a weatherproof shed of adequate dimensions with a raised floor. Each consignment shall be kept separate and marked so that it may be used in the sequence in which it is received. Any bag found to contain cement which has set or partly shall be completely discarded and not used in the works. Bags shall not be stored more than 1,500mm in height.

C. AGGREGATES

Aggregates shall conform with the requirements of B.S. 882 and the sources and types of all aggregates are to be approved in all respects by the Engineer before work commences.

The grading of aggregates shall be done within the limits set out in B.S. 882 and as later specified and the grading, once approved, shall be adhered to throughout the works and not varied without the approval of the Engineer. Fine aggregate shall be clean, coarse, siliceous sand of good, sharp, hard quality and shall be free from lumps of stone, earth, loam, dust, slat, organic matter and any other deleterious substances. It shall be graded within the limits of Zone 1 or 2 of Table 2 of B.S. 882.

Coarse aggregate shall be good, hard clean approved black trap of similar stone, free from dust, decomposed stone, clay, earth matter, foreign substances or friable thin elongated or laminated pieces. It shall be graded within the limits of Table 1 of B.S. 882 for its respective nominal size.

If in the opinion of the Engineer, the aggregate meets with the above requirements but is dirty or adulterated in any manner, it shall be screened and/or washed with clean water at the Contractor's expense.

Aggregates shall be delivered to the Site in their prescribed sizes or grading and shall be stock-piled on paved areas or boarded platforms in separate units to avoid intermixing. On no account shall aggregates be stock-piled on the ground.

The Engineer shall be entitled to require a Certificate from an approved testing laboratory in connection with each source of fine and coarse aggregates showing that materials comply with the Specification. All such testing shall be carried but at the Contractor's expense.

A. WATER

The water used for mixing concrete shall be from an approved source, clean, fresh and free from impurities and comply with the requirements of B.S. 3148.

B. MEASURED PROPORTIONS OF CONCRETE

Cement

The quantity of cement shall be measured by weight. Where delivered in bags, each batch of concrete is to use one or more whole bag of cement.

Aggregate

i) For grades "35", "30" and "25" concrete, aggregates shall be measured by weight in a weight batching machine as described hereinafter.

ii) For lower grades concrete, aggregates may be measured by weight or by volume. Where by volume, approved gauge boxes of such a size as will give the correct proportions shall be used.

C. WEIGHT BATCHING MACHINE

Weight batching machines shall be of an approved type and shall be properly maintained and checked for accuracy at regular intervals.

D. CONCRETE MIXES

The weights of fine and coarse aggregate to be used in concrete mixes "35" "30" and "20" shall be limited in accordance with the table below. The proportions of fine to coarse aggregate and cement which the Contractor proposes to use for each of the mixes specified shall first be approved by the Engineer. The Contractor will then be required to prepare Preliminary Test Cubes and have these cubes tested as described for work Cube Tests.

The test results should be submitted to the Engineer in sufficient time for further tests to be carried out should they prove unsatisfactory. Cube strengths in the preliminary tests must show crushing strengths

at least 25 per cent higher than the strengths specified for work cube tests. If the contractor is unable to produce specified cube strengths, he will be required at his own cost to increase the cement contents of the mix until satisfactory results are produced.

The Engineer may require at any time during the Contract the proportions of fine to coarse aggregate to be altered in order to produce a mix of greater strength or improved workability and providing that the total proportions of aggregate to cement is unchanged, no claim for additional cost will be considered.

Mix	Grade 34	Grade 30	Grade 25	Grade 30
Minimum cement content by weight to combined total weight of aggregate	1 to 5	1 to 6	1 to 7	1 to 7

A. WORK CUBE TESTS

Work cubes are to be made at intervals as required by the Engineer and the Contractor shall provide continuous record of the concrete work. The cubes shall be made in approved 150mm moulds in strict accordance with the Code of Practice.

Four cubes shall be made on each occasion, from different batches, the concrete being taken from the point of deposit.

Each cube shall be marked with a distinguishing number (number to run consecutively) and the date, and a record shall be kept on Site, giving the following particulars:

(a) Cube No

(b) Date made

(c) Location in work

(d) 7-day test

Date .....

Strength .....

28-day test

Date .....

Strength .....

Cubes shall be forwarded, carriage paid, to an approved Testing Authority, in time to be tested two at 7 days and one at 28 days and the remaining one at the discretion of the Engineer. No cube shall be despatched within 3 days of casting.

Copies of all Work Cube Test results shall be forwarded to the Engineer and one shall be retained on the Site.

If the strengths required above are not attained, and maintained throughout the carrying out of the Contract, the Contractor will be required to increase the proportion of cement and/or substitute better aggregates so as to have concrete which does comply with the requirement of the Contract. The Contractor may be required to remove and replace at his own cost any concrete which fails to attain the required strength as ascertained by Work Cube Tests.

The Contractor must allow in his rates for concrete test cubes for all expenses in connection with the preparation and conveyance to the Testing Laboratory and testing of test cubes and no claim in respect of his failure to do so will be entertained.

A. MIXING AND PLACING OF CONCRETE

The concrete shall be mixed only in approved power driven mixers of a type and capacity suitable for the work, and in any event not smaller than 0.5/0.33 Cu.m. capacity.

The mixer shall be equipped with an accurate water measuring device. All materials shall be thoroughly mixed dry before the water is added and the mixing of each batch shall continue for a period not less than two minutes after the water has been added and until there is a uniform distribution of the materials and the mess is uniform in colour.

The entire contents of the mixed drum shall be discharged before recharging. The volume of mixed materials shall not exceed the rated capacity of the mixer. Whenever the mixer is started, 10 per cent extra cement shall be added to the first batch and no extra payment will be made on this account.

As a check on concrete consistency, slump tests may be carried out and shall be in accordance with B.S. 1881. The Contractor shall provide the necessary apparatus and allow for the costs of such tests. The slump of the concrete made with the specified water content, using dry materials shall be determined and the water to be added under wet conditions shall be so reduced as to give approximately the same slump.

The concrete shall be mixed as near to the place where it is required as is practicable, and only as much as required for a specified section of the work shall be mixed at one time, such section being commenced and finished in one operation without delay.

All concrete must be efficiently handled and used in the works within twenty (20 minutes of mixing. It shall be discharged from the mixer direct either into receptacles or barrows and shall be distributed by approved means which do not cause separation or otherwise impair the quality of the concrete. Approved mechanical means of handling will be encouraged, but the use of chutes for placing concrete is subject to the prior approval of the Engineer.

Concrete shall be placed from a height not exceeding 1.500m directly into its permanent position and shall not be worked along the shutters to that position. Unless otherwise approved, concrete shall be placed in a single operation to the full thickness of slabs, beams and similar members, and shall be placed in horizontal layers not exceeding 1.500m deep in walls and similar members.

Concrete in columns may be placed to a height of 4.00m with careful placing and vibration and satisfactory results. Where the height of the column exceeds 4.00m suitable openings must be left in the shutters so that this maximum lift is not exceeded.

Concrete shall be placed continuously until completion of the part of the work between construction joints as specified hereinafter or of a part of approved extent. At the completion of a specified or approved part, a construction joint of the form and in the position hereinafter specified shall be made. If stopping or concreting be unavoidable elsewhere, a construction joint shall be made where the work is stopped. A record of all such joints must be made by the Contractor and a copy supplied to the Engineer.

A. MIXING AND PLACING OF CONCRETE (CONT'D)

Any accumulation of a set concrete on the reinforcement shall be removed by wire brushing before further concrete is placed.

The Contractor shall provide runways for concreting to the satisfaction of the Engineer. Under no circumstances will the runway be allowed to rest on the reinforcement.

Care shall be taken that the concrete is not disturbed or subjected to vibrations and shocks during the setting period.

Mixing machines, platforms and barrows shall be clean before commencing mixing and be cleaned on every session of work.

Where concrete is laid on hardcore or other absorbent materials, the base shall be suitable and sufficiently wetted before the concrete is deposited.

B. COMPACTION

At all times during which concrete is being placed, the Contractor shall provide adequate trained and experienced labour to ensure that the concrete is compacted in the forms to the satisfaction of the Engineer.

Concrete shall not be placed at a rate greater than will permit satisfactory compaction nor to a depth greater than 450mm before it is compacted.

During and immediately after placing, the concrete shall be thoroughly compacted by means of continuous tamping, spacing, slicing and vibration. Vibration is required for concrete of Grades "35", "30 and "25" and "20".

Care shall be taken to fill every part of the forms, to work the concrete under and around reinforcement without displacing it and to avoid disturbing recently placed concrete which has began to set.

Any water accumulating on the surface of newly placed concrete shall be removed and no further concrete shall be placed thereon until such water is removed.

Internal vibrations shall be of a frequency of not less than 7,000 cycles per minute and shall have a rotating acentric weight of at least 0.75 kg. with an eccentricity of not more than 15mm. Such vibrators shall visibly affect the concrete within a radius of 250mm from the vibrator.

Internal vibrators shall not be inserted between layers of reinforcement less than one and one half times the diameter of the vibrators apart. Contact between vibrators and reinforcement and vibrators and formwork shall be avoided.

Internal vibrators shall be inserted vertically into the concrete wherever possible at not more than 500mm centres and shall constantly be moved from place to place. No internal vibrator shall be permitted to remain in any one position for more than ten seconds and it shall be withdrawn very slowly from the concrete.

A. COMPACTION (CONT'D)

In consolidating each layer of concrete the vibrating head shall be allowed to penetrate and re-vibrate the concrete in the upper portion of the underlying layer. In the area where newly placed concrete in each layer joins previously placed concrete more than usual vibration shall be performed. The vibrator penetrating deeply at close intervals along these contacts. Layers of concrete shall not be placed until layers previously placed have been vibrated thoroughly as specified.

Vibrators shall not be used to move concrete from place to place in the formwork.

At least one internal vibrator shall be operated for every two cubic metres of concrete placed per hour and at least one spare vibrator shall be maintained on Site in case of breakdown during concreting operations.

External formwork vibrators shall be of the high frequency low amplitude type applied with the principal direction of vibration in the horizontal plane. They shall be attached directly to the forms at not more than 1.200m centres.

In addition to internal and external vibration, the upper surface of suspended floor slabs shall be levelled with a tamping or vibrating screed prior to finishing. Vibrating elements shall be of the low frequency high amplitude type operating at a speed of not less than 3.00 r.p.m.

B. CONSTRUCTION JOINTS

Construction joints shall be permitted only at the positions predetermined on the Drawings or as instructed on the Sites by the Engineer. In general they shall be perpendicular to the lines of principal stresses and shall be located at points of minimum shear, viz. vertically at, or near mid-spans of slabs, ribs and beam.

Suspended concrete slabs are generally to be cast using alternate bay construction in bays not exceeding 15.00m in length No.2 adjacent bays are to be cast within a minimum period of 48 hours of each other. The joints between adjacent bays are to be in positions agreed with the Engineer.

Under no circumstances shall concrete be allowed to tail-off, but it shall be deposited against stopping-off boards.

Before placing new concrete against concrete already hardened, the face of the old concrete shall be thoroughly hacked, roughened and cleaned, and laitance and loose material removed therefrom, and immediately before placing the new concrete the surface shall be saturated with water and covered with a coat of mortar at least 25mm in thickness composed of cement and fine aggregate in the proportions used in the concrete.

C. CURING AND PROTECTION

Care must be taken that no concrete is allowed to become prematurely dry and the fresh concrete must be carefully protected within two hours of placing from rain, sun and wind by means of hessian sacking, polythene sheeting, or other approved means. This protective layer and the concrete itself must be kept continuously wet for at least seven days after the concrete has been placed.

CURING AND PROTECTION (CONT'D)

The Contractor must allow for the complete coverage of all fresh concrete for a period of 7 days. Hessian or polythene sheeting shall be in the maximum widths obtainable and shall be secured against wind. The Contractor will not be permitted to use bags, hessian or other material in small pieces.

Concrete in foundations and other underground work shall be protected from admixture with falling earth during and after placing.

Traffic or loading must not be allowed on the concrete until the concrete is sufficiently matured and in no case shall traffic or loading be of such magnitude as to cause deflection or other movement in the formwork or damage to the concrete members. Where directed by the Engineer, props may be required to be left in position under slabs and other members for greater periods than those specified hereafter.

A. FAULTY CONCRETE

Any concrete which fails to comply with these preambles, or which shows signs of setting before it is placed shall be taken out and removed from the Site. Where concrete is found to be defective after it has set, the concrete shall be cut out and replaced in any faulty, honeycombed, or otherwise defective concrete be repaired or patched until the Engineer has made an inspection and issued instructions for the repair. The whole of the cost, whatsoever, which may be occasioned by the need to remove faulty concrete shall be borne by the Contractor.

B. ROD REINFORCEMENT

The steel reinforcement shall comply with the latest requirements of the following British Standards:-

- Hot rolled M.S. for the reinforcement of concrete B.S. 4449
- Hot rolled H.Y. steel for the reinforcement of concrete B.S. 4449
- Cold twisted H.Y. steel for reinforcement of concrete B.S. 4461
- Hard drawn steel wire B.S. 4482

The Contractor shall submit a test certificate of the rolling. Reinforcement shall be stored on racks above ground level. All reinforcement shall be free from loose mill scales or rust, crease, paint or other substances likely to reduce the bond between the steel and concrete.

C. FABRIC REINFORCEMENT

Fabric reinforcement shall be electrically cross-welded steel wire mesh reinforcement to B.S. 4483 and of the size and weight specified.

D. FIXING ROD REINFORCEMENT

Reinforcement shall be accurately bent to the shapes and dimensions shown on the Drawings and Schedules and in accordance with B.S. 4466. Reinforcement must be cut and bent cold and no welded joints will be permitted unless so detailed.

No concreting shall be commenced until the reinforcement is in position and until approval has been obtained. The Contractor shall give two clear days's notice of his intention to concrete to the Engineer.

A. FIXING ROD REINFORCEMENT CONTD

The Contractor is responsible for maintaining the reinforcement in its correct position, according to the Drawings, before and during concreting. During concreting a competent steel fixer must be in attendance on the concretors to adjust and correct the positions of any reinforcement which may be displaced. The vibrators are not to come into contact with the reinforcement.

Irrespective of whether any inspection and/or approval of the fixing of the reinforcement has been carried out as above, it shall be the Contractor's sole responsibility to ensure that the reinforcement complies with the details on the Drawings or bending schedules and is fixed exactly in the positions shown therein and in the positions to give the prescribed cover.

The contractor will be held entirely responsible for any failing or defect in any portion of the reinforced concrete structure and including any consequent delay, claims, third party claims, etc, where it is shown that the reinforcement has been incorrectly positioned or is incorrect in size or quantity with respect to the detailed drawings or bonding schedules.

Spacing blocks of approved sizes and shape made of concrete similar to that used in the surrounding construction and fixed to the reinforcement or formwork by No.18 S.W.G. wire set into the spacer blocks or other approved means shall be provided where necessary to ensure that the requisite cover is obtained. The contractor is to include for providing sufficient such spacer blocks in his prices for steel reinforcement.

Unless otherwise directed the concrete cover to rod reinforcement over main bars in any face shall be:-

Foundations against earth face	75mm
Foundations against blinding	50mm
Columns	40mm
Beams	25mm
Slabs	15mm
Walls	25mm

B. FIXING FABRIC REINFORCEMENT

The fabric shall be free from scale, rust, grease or other substance likely to reduce the bond between the steel and the concrete and shall be laid with minimum 300mm laps and bound with No. 18 S.W.G. annealed iron wire.

Where reinforcement projects from a concrete section of the structure and this reinforcement is expected to remain exposed for some time, it is to be coated with a cement grout to prevent rust staining on the finished concrete. This grout is to be brushed off the reinforcement prior to the continuation of concreting.

A. FIXTURES AND INDENTATIONS IN CONCRETE

No openings, chases, holes or other voids shall be formed in the concrete without the prior approval of the Engineer. Details of any fixtures to be permanently build into the concrete including the proposed positions of all conducts 25mm and over in diameter shall be submitted to the Engineer for his approval before being placed.

B. CHASES, HOLES, ETC., IN CONCRETE

The Contractor shall be responsible for the co-ordination with the Electrical and other Sub-Contractors for incorporating electrical conduits, pipes, fixing blocks, chases, holes and the like in concrete members as required and must ensure that adequate notice is given to such Sub-Contractors informing them when concrete members incorporating the above are to be poured. The Contractor shall submit full details of these items to the Engineer for approval before the work is put in hand. All fixing blocks, chases, holes etc. to be left in the concrete shall be accurately set out and cast with the concrete.

Unless otherwise instructed by the Engineer, all electrical conduits to be positioned within the reinforced concrete shall be fixed inside the steel cages of beams and columns and between the top and bottom steel layers in slabs and similar members.

C. FORMWORK

The method and systems of formwork which the Contractor proposes to use shall be approved by the Engineer before construction commences. Formwork shall be substantially and rigidly constructed of timber or steel or precast concrete or other approved material.

All timber for formwork shall be good, sound, clean, sawn well-seasoned timber, free from warps and loose knots and of scantlings sufficiently strong for their purpose.

D. CONSTRUCTION OF FORMWORK

All formwork shall be of sufficient thickness and with joints close enough to prevent undue leakage of liquid from the concrete and fixed to proper alignment, level and plumb and supported on sufficiently strong bearers, shores, braces, plates, etc, properly held together-by bolts or other fastenings to prevent displacement, vibration or movement by the weight of materials, men and plant on same and so wedged and clamped as to permit of casing and removal of the formwork without jarring the concrete. Where formwork is supported on previously constructed portions of the reinforced concrete structural frame, the Contractor shall in consultation with the Engineer ensure that the supporting concrete structure is capable of carrying the load and/or sufficiently propped from lower floors or portions of the frame to permit the load to be temporarily carried during construction.

Soffits shall be erected with an upward camber of 10mm for each 4.000m of horizontal span or as directed by the Engineer.

Great care shall be taken to make and maintain all joints in the formwork as tight as possible, to prevent the leakage of grout during vibration. All faulty joints shall be caulked to the Engineer's approval before concreting.

The formwork shall be sufficiently rigid to ensure that no distortion or bulging occurs under the effects of vibration,. If at any time the formwork is insufficiently rigid or in any way defective the Contractor shall strengthen or improve such formwork as the Engineer may direct.

The Contractor's attention is drawn to the various surface textures and applied finishes required and the faces of formwork next to the concrete must be of such material and construction and be sufficiently

true to provide a concrete surface which will in each particular case permit the specified surface treatment or applied finish.

All surfaces which will be in contact with concrete shall be oiled or greased to prevent adhesion of mortar. Oil or grease shall be of a non-staining mineral type applied as a thin film before the reinforcement is placed. Surplus moisture shall be removed from the forms prior to placing of the concrete.

Temporary openings shall be provided at the base of columns, wall and beams forms and at any other points where necessary to facilitate cleaning and inspection immediately before the pouring of concrete. Before the concrete is placed the shuttering shall be trued up and any water accumulated therein shall be removed. All sawdust, chips, nails and other debris shall be washed out or otherwise removed from within the formwork. The reinforcement shall then be inspected for accuracy of fixing. Immediately before placing the concrete the formwork shall be well wetted and inspection openings shall be closed. The erection, casing, striking and removing of all formwork must be done under the personal supervision of a competent foreman, and any damage occurring through faulty formwork or its incorrect removal shall be made good by the Contractor at his own expense.

After removal of formwork, all projections, fins etc., on the concrete surface shall be chipped off, and made good to the requirements of the Engineer at the Contractor's expense. Any voids or honeycombing shall be treated as described under "Faulty Concrete".

A. STRIPPING FORMWORK

All formwork shall be removed without undue vibration on short and without damage to the concrete. No formwork shall be removed without the prior consent of the Engineer and the minimum periods that shall elapse between the placing of the concrete and the striking of the formwork will be as follows:

Beam sides, wall and column (unloaded)	-	2 days
Slab soffits (props left under)	-	3 days
Beam soffits (props left under	-	7 days

Removal of props (partly subject to 7 days concrete cube strength being satisfactory)			
to:	Slabs	-	10 days
	Beams	-	14 days

If the Contractor wishes to take advantage of the shorter stripping times permitted for beam and slab soffits when props are left in place he must so design his formwork that sufficient props as agreed with the Engineer can remain in their original position without being moved in any way until expiry of the minimum time for removal of props. Stripping and re-propping will not be permitted.

The above times may be reduced in certain circumstances, at the discretion of the Engineer provided an approved method is adopted at the Contractor's expense to ensure that the required concrete strength is attained before the forms are stripped.

The tops of retaining walls shall be adequately supported with stout raking props at intervals required by the Engineer. These props are not to be removed until after 7 days after casting of the floor slab.

A. FAIR FACE FINISH

Where fair face finish is specified the concrete shall be brought to a perfectly true smooth and even surface by rubbing with carborundum stone dipped in cement grout. Such work must be commenced within one hour of removing the formwork and actively and rapidly pursued until completed, the object being to complete the finish as soon as possible after the removal of the shuttering. On no account may such work be postponed to a later stage in the contract. Fair face surfaces shall be clean, smooth, even true, to form and free from all board marks, joints marks, honeycombing, pitting, etc. The Contractor is permitted at his own expense provide smooth lining to the forms which will achieve the required finish without rubbing down. All rubbed down work must be lightly washed with plain cold water at the completion of the contract, and not before the cement grout used in the finish is at least four weeks old after initial mixing.

B. BOARD MARKED FINISH

Where so directed or measured, the finish shall be that of a board marked pattern in panels, the boards shall be arranged vertically or horizontally and of widths and sizes, all as detailed on the Drawings. All exposed concrete will be left unpainted and therefore every are and attention shall be paid to obtain a satisfactory visual appearance and the maintenance of the same throughout the building operation. The finished surfaces shall be free from blow holes, hungry patches and other blemishes and a sample panel is to be provided and approved by the Engineer before work commences.

Unless otherwise specified, the formwork shall be rip sawn softwood to the Engineer's approval and shall have a sufficiently strong grain to impart a corresponding pattern on the concrete surface. Unless otherwise approved it shall have four uses only and shall be carefully cleaned from adhering grout after each use. It shall be lightly oiled with an approved non-staining mould oil.

COMPOSITE

C. SUSPENDED SLABS

Hollow concrete blocks shall be used in composite suspended slabs. The blocks shall be 225mm wide, 225mm long and 125mm high with chamfered edges and having 25mm thick members. Blocks shall be well made, true to shape and of uniform density, free from cracks and distortion to the approval of the Engineer. The top sides and soffites shall be finished so as to provide an effecient key between concrete and plasterwork. Any blocks not conforming to the specified requirements shall be rejected.

The blocks shall be laid in the positions shown on the Drawing, care being taken to ensure that units maintain the full specified rib widths throughout and do nt encroach upon any space intended for insitu concrete beams or otherwise also that gaps between the Units do not exceed 1.6mm anywere.

The Units shall be supported with supports to the approval of the Engineer. Reinforcement in composite slabs shall be positioned accurately as shown on the Drawings secured against displacement and specified cover provided.

Before concreting, the positioned blocks shall be thoroughly sprayed with water. All gaps between the blocks shall be stopped with a stiff grout and all open ends shall be sealed with cement mortar (1:5) minimum 40mm thick then left to mature for one week before concrete is placed.

The concrete mix to be used shall be as specified and any limits as to size of aggregate etc., specified must be adhered to.

The curing of composition slabs. The temporary supports under slabs shall be left in position for a period of fourteen days and they shall not be removed any earlier except with the approval of the Engineer.

A. PRECAST CONCRETE

Unless otherwise approved by the Engineer, all precast concrete construction shall be carried out on the site and shall conform to requirements given elsewhere in these Preambles.

The maximum size of coarse aggregate in precast concrete shall not exceed 20mm and for thicknesses less than 75mm it shallnot exceed 15mm.

The compacting of precast shall conform with requirements given elsewhere in these Preambles except for thin slabs where use of immersion type vibrators is not practicable.

The concrete in these slabs may be consolidated on a vibrating table or by any other methods approved by the Engineer.

The precast work shall be made under cover and shall remain under the same for seven days. During this period and for a further seven days the concrete shall be shielded by sacking or other approved material kept constantly wet. It shall then be stacked in the open for at least a further seven days to season before being set in position.

Precast concrete units shall be constructed in individual forms. The method of handling the precast concrete units after casting, during curing and during transport and erection shall be subject to the

approval of the Engineer, providing that such approval shall not relieve the Contractor of responsibility for damage to precast concrete units resulting from careless handling.*

Repair of damage to the precast concrete units, except for minor abrasions of the edges which will not impair the installation and/or appearance of units will not be permitted and the damaged units shall be replaced by the Contractor at his own expense.

Except where pre cast work is described as "fair face" or as having an "exposed aggregate" or terrazzo finish, the moulds shall be made of suitable strong sawn timber true in form to the shapes required. Unless otherwise described, faces are to be left rough from the sawn moulds.

Where precast work is described as "fair face" the moulds are to be made of metal or are to have metal or plywood linings or are to be other approved moulds which will produce a smooth dense fair face to the finished concrete suitable to receive a painted finish direct and free from all shutter marks, holes, pittances, etc. In his prices for such precast work the Contractor shall include for all rubbing down to produce the finish required, to the satisfaction and approval of the Engineer. Where precast work is to have "exposed aggregate" or terrazzo finish the moulds shall be constructed to the requirements given for moulds for "finished fair" work. The method of achieving the exposed aggregate finish shall be the "aggregate transfer" or other approved methods.

The precast units shall be installed to the lines, grades and dimensions shown on the Drawings or as directed by the Engineer.

A. CONCRETE SURFACE BEDS

Concrete for surface beds shall be Grade 25.

Before placing concrete and where specified or shown on the Drawings a layer of 500 gauge polythene or diothene sheeting shall be laid on the base course. Minimum 300mm laps shall be provided at all joints.

The concrete shall be placed as soon as possible after being mixed. In transporting the concrete, adequate precautions shall be taken to avoid damage to the prepared base. The concrete shall be spread to such a thickness that when compacted it shall have the finished thickness as specified or shown on the Drawings. A layer of concrete 50mm less than the

finished thickness shall first be spread and struck off at the correct level to receive the top fabric reinforcement. The top layer shall then be added. Not more than 30 minutes shall elapse, between spreading the bottom layer and the start of compaction of the top layer. The Contractor shall be responsible for maintaining the reinforcement in its correct position during the placing and compaction of the concrete.

The compaction and finishing of the concrete shall be effected by immersion vibrators and hand or mechanical tamper weighing not less than 10kg. per metre run and having a tamping edge shod with a steel strip 75mm wide fixed to the tamper by countersunk screws. Immersion vibrator with "spade" attachment will be permitted. Compaction shall be continued until a dense, scaled surface finish is achieved. Over-compaction causing an excessive amount of lines to be brought to the surface shall be avoided.

The surface of the concrete shall be finished to the surface texture specified to the levels, falls and cross-falls, as directed or shown on the Drawings and shall be subject to the following tolerances:-

- The level shall be within + or - 6mm of the levels specified;
- The falls shall be within 10% of the falls specified;
- The smoothness shall be such that departures from a 3.00m straight edge laid in any direction shall not exceed 3mm.

Minor irregularities shall be made good by the use of a steel float but in no circumstances shall mortar be used to make good the surface.

As soon as the surface has been finished, it shall be protected against too rapid drying by means of damp hessian, polythene sheeting or other approved means placed carefully on the surface and kept damp and in position for 7 days and the concrete shall be kept wet for a further 21 days. The most critical period is the first 24 hours after placing and curing during that time shall be very thorough. The Contractor is to obtain the Engineer's approval to the material and method he proposes to use for curing and no concreting will be permitted until such material is sufficient on site.

Forms shall not be removed from freshly placed concrete until it is at least 24 hours old. Care shall be taken that in their removal no damage is done to the concrete, but should any damage occur the Contractor shall be responsible for making it good.

MASONRY AND BLOCKWORK

A. GENERALLY

i) Prices for all walling shall include for normal rough and straight cutting, plumbing angles, all cutting and waste and split courses necessary for bond, bonding at angles, intersections and junctions of walling of all thicknesses, split courses, cutting and pinning up to columns, beams, slabs, etc., hoisting and building at any level, forming all openings and reveals to same and all cutting and waste to walling in short lengths such as millions unless specifically measured.

ii) Prices for hollow block walling must further include for all necessary solid blocks or fine concrete filling to open ends of blocks at intersections, ends and angles of walling.

iii) Prices for damp-proof courses, which are measured the net area covered, shall include for all cutting and waste and extra material in laps at joints, angles, etc.

B. CEMENT

All cement used for making mortar shall be Portland cement as described in "Concrete Work".

C. SAND

All sand used for making mortar shall be clean, well graded, siliceous sand of good sharp quality, equal to samples which shall be approved by the Architect. It shall be free from lumps of stone, earth, loan, dust, salt, organic matter and any other deleterious substances, sieved through a fine sieve and washed if so directed by the Architect.

D. LIME

i) Lime for mortar shall be non-hydraulic or semi-hydraulic quick lime or hydrated lime in accordance with B.S. 890, Class `B'.

ii) Quick lime shall be run to putty immediately after delivery to the site in a pit dug on the Site or in an approved container. The water to be first run into the pit or container and the lime to be added until it is completely submerged and stirred until all lumps are disintegrated and the resulting mild lime shall then be run through a 3mm square mesh sieve and run into a pit or other container and kept clean and moist for not less than 4 weeks before use.

iii) Hydrated lime shall be added to water in a clean receptacle thoroughly mixed to the consistency of thick cream and allowed to stand, and be kept clean and moist for not less than 16 hours before use.

A. CEMENT MORTAR

Cement mortar shall be composed of Portland cement and sand in 1:5 ratio by volume, measured in specially prepared gauge boxes and thoroughly mixed in an approved mechanical mix or mixed dry on clean and approved mixing platforms, with water added afterwards until all parts are completely

incorporated and brought to a proper consistency. The use of re-tempering of wholly or partially set mortar will not be allowed.

B. CONCRETE BLOCKS

i) Concrete blocks shall be solid, hard, true to size and shape with sharp arises in accordance with B.S. 2028, type `A', and approved by the Architect.

ii) They shall be obtained from an approved manufacturer or manufactured on Site in approved block making machines. The cement aggregate mix used shall be not less than 1:9 by volume and the maximum size of aggregate shall not exceed 12mm.

iii) All solid and hollow concrete blocks used in walling must be capable of withstanding a crushing pressure of not less than 10.5 N/mm^2 after 28 days.

iv) The blocks on removal from the machine shall be carefully deposited on edge on racks under sheds erected by the Contractor and left for 3 days during which period they shall be kept constantly wet after which they shall be placed on edge in the open on the racks protected by sacking or other approved covering and kept wet for a further 5 days. Thereafter the blocks shall be left in the same position without wetting for a further 20 days.

v) No blocks will be allowed to be used in the work until 28 days old and until samples have been taken and approved by the Architect.

vi) They shall be laid dry except for the top surface which shall be wetted immediately before mortar is spread on. After laying no further water shall be applied.

vii) The concrete blocks shall be 200mm high to bond in satisfactory with all other walling.

C. STONE WALLING

i) The stone for walling shall be sound and hard throughout, free from all defects, and shall be obtained from a quarry approved by the Architect. It shall be chisel dressed into true rectangular blocks, with each surface even and at right angles to all adjoining surfaces.

ii) The Contractor shall if necessary re-dress the beds of stones on the site to the minimum extent required to obtain uniformity of coursing, and his Tender shall be deemed to include for such re-dressing.

iii) Stone blocks for general walling shall nominally be 200mm high, 90mm, 140mm or l90mm thick as required for the works, the maximum permissible variations of any of the foregoing dimensions being 12mm.

iv) Stone shall not be less than 450mm long but a proportion of 20% will be permissible in lengths between 300mm and 450mm long. Samples shall be submitted to the Architect for approval and when so approved shall become the standard for the works.

A. STABILISE EARTH BLOCKS

These shall consist of cement mixed with selected approved red soil in a proportion not less than 1:20 by volume.

The manufacture and curing of the blocks shall generally be as described for concrete block above.

B. BEDDING AND JOINTING

The blocks shall be bedded and jointed in cement and sand mortar as described with beds and joints not more than 12mm or less than 6mm thick, all flushed up and grouted solid as the work proceeds.

C. REINFORCED WALLING

Walls of less than 200mm thickness shall be reinforced with one row of 20 gauge hoop iron 20mm wide, built into every third course, well lapped at junctions and joints and carried at least 100mm into abutting walls at intersections.

D. PROTECTION

All walling shall be properly protected while mortar is setting, as the Architect shall direct.

E. SETTING OUT RODS

The Contractor provide proper setting out rods and set out all work on same for courses, openings, heights, etc, and shall built the walls, piers, etc., to widths, depths and heights indicated on the Drawings. Setting out rods to be gauged to allow an average height of 200mm for each course.

F. BONDING ETC

i) The blocks or stone for general walling shall be bedded and jointed as described, properly bonded together and in such manner that no vertical joint in any one course shall be within 100mm of a similar joint in the courses immediately above or below.

ii) Alternate course of walling at all angles and intersections shall be carried through the full thickness of the adjoining wall.

iii) All walling shall be built entirely solid in blocks, without voids.

iv) All perpends, reveals and angles of the walling shall be built strictly true and square.

v) All walling shall be flushed up and grouted solid as the work proceeds.

vi) All walls throughout the work shall be carried up evenly, no part being allowed to be carried up more than 100mm higher at one time than any other part, and in such cases the jointing shall be made in long steps so as to prevent cracks arising, and all walls shall be levelled around at each state. All faces of walls to be plastered are to have all projections dressed off and the joints raked out as key for plaster.

A. FIXING OF TIMBER DOOR FRAMES

i) All door frames are to be bedded, and pointed in cement mortar (1:5).

ii) All frames are to be securely fixed to reveals by means of 25x3mm mild steel cramps 300mm long, bent and screwed to backs of frames and with fanged end built 200mm into joints of walling, three cramps to each side frame of each door. Where the door is provided with fanlights etc., four cramps are to be used to each side frame.

B. DAMP PROOF COURSE

The bituminous felt sheeting for damp-proof course shall be three-ply "Pluvex" No.1 or other equal and approved in accordance with B.S. 743, weighing not less than 3.80Kgs. per square metre. The sheeting is to be lapped 150mm at running joints and the full width of walls at angles. The net area covered is measured and the Contractor shall allow in his prices for all cutting and waste and extra material in laps at joints angles etc.

C. CONCRETE TILE ROOFING

i) Concrete roofing tiles shall be size 420x335mm single lap, double roll interlocking precast concrete type with no granules and with colours premixed during manufacture and with minimum strength to comply with B.S.550. Socketed hips and third or half round ridge tiles shall be provided as required. Colours shall be selected by the Architect.

ii) All tiles shall be uniform in size, shape and colour and free from twists or other defects and shall be laid in strict accordance with the manufacturer's printed instructions.

iii) On gable ends to roofs the tiles should be laid with straight joints with the special left-hand verge tiles provided by the manufacturer.

iv) All tiles to be laid shall be equal in every respect to samples to be deposited with and approved by the Architect. No broken, chipped, cracked or otherwise defective tiles shall be used in the work.

v) All tiles so verge, top and eaves courses shall be securely fixed to precast hollow clay roof beams (`Claymat') with cement mortar (1:3).

vi) The tiles shall be laid on precast hollow clay roof beams (`Claymat'). The tiles will be laid and fixed strictly to manufacturer's instructions.

vii) The ridge and hip tiles shall be bedded in coloured cement mortar (1:3) to match colour of tiles.

viii) Extreme care should be taken to avoid any staining or marking of the roof tiles with mortar and any tiles so marked must be replaced immediately.

A. 150MM DIAMETER HALF ROUND CLAY ROOF TILES

150mm diameter half round clay roof tiles shall be of approved manufacture. They shall be laid at verges, top and eaves as described for concrete tiles.

The tiles shall be laid on precast hollow clay roof beams (`Claymat'). The tiles will be laid and fixed strictly to the manufacturer's instructions.

Ridge and hip tiles shall be bedded in coloured cement mortar (1:3) to match colour of tiles.

Care should be taken to avoid any straining or marking of the roof tiles with mortar and any tiles so marked must be replaced immediately.

B PRECAST HOLLOW CLAY ROOF BEAMS (`CLAYMAT')

Precast hollow clay roof beams shall be `Claymat' roof beams as produced by M/S Clayworks Ltd, who can produce and supply them to the Contractor if the Contractor so chooses.

The precast hollow clay roof beams shall be 300mm wide x 100mm or 125mm thick as detailed in the measured works and to lengths shown therein. They shall be made out of standard 300mm wide hollow clay pots as recommended by M/S Clayworks Ltd, and each beam shall be reinforced at the bottom with 1No. 12mm diameter square twisted bar. The trough section of the beam shall be filled in with concrete Grade 30 (5mm aggregate) giving a crushing strength of not less than 30N/mm^2 at 28 days. The top surface of the beam shall be reinforced with modified B.R.C. mesh No. 610. The tenderer's price is to include for both top and bottom reinforcement and concrete fill to trough.

C. PRECAST HOLLOW CLAY FLOOR BEAMS ("FREESPAN")

Precast hollow clay floor beams shall be `Freespan' floor beams as produced by M:S Clayworks Ltd., who can produce and supply them to the Contractor if the Contractor so chooses.

The precast hollow clay floor beams shall be 300mm wide x 100mm thick and to lengths detailed in the measured works. They shall be made out of standard 300mm wide hollow clay pots as recommended by M/S Clayworks Ltd., and each beam shall be reinforced at the bottom with 1No. 12mm diameter square twisted bar. The trough section of the beam shall be filled in with concrete Grade 20 (12mm aggregate) giving a crushing strength of not less than 20N/mm^2 at 28 days. The tenderer/s price is to include for both top reinforcement and concrete fill to trough

.

ROOFING

D. GENERALLY

Bituminous felt, flashing, etc., have been measured the net area covered. Prices shall include for all straight cutting and waste and laps and in the case of flashings, covering to kerbs, etc., where the net covered girth is measured and necessary overlaps for bond with adjoining areas.

BITUMINOUS FELT ROOFING

A. BUILT-UP ROOFING

The built-up roofing shall be in accordance with B.S. 747 (Classes 1, 2 and 5) applied to a screeded base and shall comprise the following applications (see Clause `E' below), laid strictly in accordance with the Manufacturer's printed instructions and the Code of Practice 144.101.

B. STORAGE

Rolls must be transported and stored on end, one roll high, and adequately protected from the sun

C. SCREED

The minimum fall for the screed on flat roofs be 1 or 30. The screed must be thoroughly dry and swept clean before commencing laying operations.

D. SEQUENCE

i) Jointing Compound: One application of hot bituminous compound weighing not less than 16.3 Kgs. per 10 square metres.

ii) First Layer: (Class 1A) One layer of Self-Finished felt weighing not less than 13.6 Kgs. per 10 square metres.

iii) Jointed Compound: As described in (i) above.

iv) Second Layer: (Class 1A) One layer of Self-Finished felt weighing not less than 13.6 kgs. per 10 square metres.

v) Jointing Compound: As described in (i) above.

vi) Third Layer: (Class E) One layer of mineral surfaced roofing felt weighing not less than 36.2 Kgs. per 10 square metre. (Colour to be decided by the Architect).

E. ALUMINIUM FLASHING

Aluminium flashings shall be formed out of 22 gauge super purity aluminium with natural mill finish to B.S. 1470. Where flashings are built into joints or tucked into groovers the minimum depth is to be 25mm and they are to secured by folded aluminium wedges at 450mm centres and pointed in cement mortar (1:3).

F. CEMENT AND SAND ROOF SCREEDS

The roof screeds shall be formed of cement and sand (1:3). The screeds shall be laid in bays, square where possible, of maximum 10 square metres. Each bay shall be formed between stop boards of the correct height and cut on each side to indicate the slope required in the roofing. The screed shall be trowelled with a wood float to true and accurate falls or cross falls upto the stop boards. A 10mm wide gap shall be felt between each screed bay for the full depth of the screed.

The screeds shall be allowed to cure thoroughly to attain maximum shrinkage. Any cracks which appear due to shrinkage shall be made good.

The gaps between the screed bays shall be filled as follows:-

1. Brush or blow out joints to remove dirt, dust, etc., and prime the sides of the joints using a piece of sponge or similar dipped in a mixture of equal volumes or "Flintkote" Type 1 or Type 3 emulsion and water. Allow to dry.

2. Fill up joints slightly proud on the surface using a 1:2:3) mastic.
This mastic shall be prepared by mixing one volume of cement with three volumes of sand, adding a little water to dampen the mix, then adding two volume of "Flintkote" Type 1 or Type 3 emulsion. The mastic is thoroughly mixed together adding further water as necessary until it is a uniform brown colour, without being too sloppy. Allow to set and dry.

The screed joints shall then be covered with a 200mm wide strip of building paper not bonded to the screed joint and well lapped at angles and junctions before the application of the roof covering.

A. LIGHTWEIGHT ROOF SCREED

Lightweight roof screed shall be composed of bases of cement sand and pumice (1:4:8) finished with a 12mm cement and sand (1:5) topping laid whilst the base is still green and trowelled smooth to the satisfaction of the Architect.

The screeds are to be laid as described in `Cement and Sand Roof Screeds'.

B. PVC RAINWATER PIPES

PVC rainwater pipes and fittings are to comply with B.S. 4576 with rubber ring seal joints.

Pipes are to be fixed to the structure with PVC holderbats or brackets built-in or plugged and screwed at maximum 2 metre centres.

Bends, swan necks, discharge chutes and fittings generally are to be fixed where necessary to facilitate the flow of water.

Rainwater outlets shall be PVC suitable for the roof finish in which they occur with domical PVC grating.

C. PROTECTION

The Contractor is to take all necessary precautions to protect the finished work and must ensure that no damage occurs to the roofing until completion of the works.

D. COMPLETION OF THE WORKS

On completion of the works, the contractor shall clear away, ensure that rainwater outlets are clear and generally leave the roof areas in a clean and watertight condition to the satisfaction of the Architect.

ASBESTOS ROOF SHEETING

A. MATERIALS

Asbestos cement roof sheeting and accessories shall be of approved manufacture in accordance with B.S. 690 and of an approved colour. The thickness of the sheeting shall be as specified and shall be laid and fixed strictly in accordance with the manufacturer's printed instructions. The sheets shall be super sevenasbestos cement sheets. Cooker hoods and flue extraction accessories shall be as per the specifications by the manufactures (M/S Simbarite).

B. LAPS

Sheeting shall be laid with ends laps of 150mm and side laps of one corrugation on the side away from the prevailing wind.

C. FIXING TO PURLINS

The sheets shall be fixed on to timber purlin 150 x 50mm with 8mm galvanised gum let pointed screws 114mm long and which shall have "Selawasher" plastic washers or other equal and approved.

D. HOLES

Holes shall be drilled through the ridges of corrugations, not in the hollows.

E. RIDGES ETC.

Ridges and other accessories shall be supplied as shown on the Drawing and shall be fixed to purlins as above described.

F. FIXING BOLTS

All fixing bolts shall comply with B.S. 1494

G. OUTLETS

All outlets to be fixed 25mm below finished screed level.

H. PIPES TO BE LAID BEFOREHAND

The Contractor must ensure that all necessary plumbing, outlet etc., pipes passing through roof are fixed in position before laying is commenced.

I. LAPS AND JOINTS

All laps to the fleet layers shall be in the directions of the slope and 100mm minimum and sealed in bituminous compound. All joints of successive layers must be staggered.

J. PROTECTION

The Contractor will take all necessary precautions to ensure that no damage is caused to the built-up roofing after completion of laying by further building operations, storage of heavy objects, traffic or any cause whatsoever.

A. GUARANTEE

Unless otherwise specified the Sub-Contractor will be required to submit a written quarantee to the Architect at the time of tendering.

FIBRE CONCRETE ROOFING TILES

B. SPECIFICATION

The Specification shall be as "Draft Kenya Standard Specification for Fibre Concrete Roofing Tiles, Ref.K502 - 749" which is briefly described in the following clauses.

C. MATERIALS

i) Cement - ordinary Portland Cement of an acceptable standard and quality

ii) Sand - A clear graded sand is required

iii) Fibre - Many types of natural and artificial fibre are acceptable, Sisal, Coir and Jute are the most commonly used. The fibre should be free from sugar and other chemicals.

D. PREPARATION OF MATERIALS

i) Sand - This is sieved and only the fraction passing 2mm is used. If the sand contains above 5% clay and silt then washing will be necessary.

ii) The fibre is chopped to an average length of 15mm with a maximum length of 20mm and a minimum of 10mm.

E. PRODUCTION PROCEDURE

i) Cement and sand are mixed dry in the proportions of 1:3 (cement:sand) by weight.

ii) 0.75% by weight (of the cement and sand mixture) is added and mixed in to provide even distribution. The fibre is added to hold the matrix together when in its wet state and to control cracking during curing. It does not act as a reinforcement.

iii) Water is added and mixed with the dry fibrous mortar taking care not to add an excess of water. A slump of approximately 28mm is normally considered ideal.

iv) The hinged frame on the vibrating table is lifted and a polythene interface sheet is placed on the table. The frame is then closed and locked in position.

v) A measured quantity of mortar is then placed on the vibrating table and is vibrated and screeded for approximately 40 seconds until a flat, smooth and even surface is achieved.

vi) A small quantity of the mortar is then placed in the nib or lug position and vibrated for 5 seconds to ensure adequate bonding to the tile.

vii) A wire loop is then pushed into the nib which can be nailed to act as fixing between tile and batten. Alternatively, a hole can be made in the nib itself by pushing a nail through the nib.

viii) The metal frame on the vibrating table is then unlocked and lifted.

ix) The polythene interface sheet under the vibrated mortar is lifted and thus the mortar is transferred to the pan tile mould. Care is taken in aligning the wet mortar on the mould to ensure the correct shape of the finished pan tile.

x) After 24 hours the FC tile is carefully removed from the mould and interface sheet and the edges of the tile "cleaned off" with a knife. The mould and interface sheet should both be cleaned with soap and water before reuse.

xi) The tile is now placed under water for 7 days to allow maximum strength gain in optimum curing conditions.

xii) After 7 days the tiles are removed from the water and air cured for a further 14 days after which they are ready for use.

xiii) Ridge tiles are made using the same procedure with a 10mm square frame and a V shape mould.

NOTE

The production process of Fibre Concrete Tiles is very simple and can be learnt in a few days at the ITW training facility at Karen, Nairobi.

C A P E N T R Y

A. ALL TIMBER

Shall be in accordance with the latest approved Grading Rules issued by the Government of Kenya (Legal Notice No. 358). Timber for Carpentry shall be SECOND (OR SELECT) GRADE.

B. GENERALLY

All timber as it arrives on the site shall be inspected by the Contractor, and any timber brought on the site and not complying with the specification or not approved must be removed forthwith from the site and only timber as approved shall be used in the works.

The Contractor shall upon signing the contract, purchase sufficient supplies of specified hardwood to avoid possible shortage at a later date.

C. SPECIES OF TIMBER

The following timber shall be used:-

Standard Common Name	Botanical Name
Podocapus	Podocarpus spp
Cedar	Juniperus Procera
African Mahogany (Munyama)	Khay Anthotheca

A. TOLERANCES IN THICKNESS

Shall conform with the following extracts from the government of Kenya Grading Rules (or the Metric equivalent).

1) Hardwood Grading (First and second grade)
The following tolerances in thickness will be admitted:-

a) 1½mm oversize on pieces upto 25mm in thickness

b) 3mm oversize on pieces over 25mm and upto 50mm in thickness

c) 6mm oversize on pieces over 50mm in thickness

2. Softwood grading: Strength Grades (for carpentry) first and second grades.

On no account shall undersize timber be allowed for use.

Oversize: All timber to be sawn oversize by 1½mm per 25mm thickness and width. Not more than 3mm in thickness and not more than 6mm in width.

3. Softwood Grading: Appearance, Grades (for joinery) First and Second Grades.

All as for strength grades above.

B. TIMBER

All timber shall be free of live borer beetle or other insect attack when brought upon the site. The Contractor shall be responsible upto the end of the maintenance period for executing at his own cost all work necessary to eradicate insect attack of timber which becomes evident including the replacement of timber attacked or suspected of being attacked, notwithstanding that the timber concerned may have already been inspected and passed as fit for use.

C. SEASONING OF TIMBER

All timber shall be seasoned to a moisture content of not more than 22% for carpentry.

D. PRESSURE IMPREGNATED TREATMENT

All carpentry-timbers, sawn joinery and timber groups of fixing shall be treated with pressure impregnated "Celcure" or "Tanalith" solution with a minimum net retention of 5.6 kg of dry salt per cubic metre. If so required "Charge Sheets" issued after treatment with "Celcure" or "Tanalith" shall be submitted by the Contractor to the Architect for his retention. All cut ends and any other cut faces or timbers sawn after treatment shall be treated before fixing with "Celucure" B or "Wolmanol" solution brushed on. The Contractor's prices for such timber hereinafter must allow for the above treatment.

E. INSPECTION AND TESTING

The Architect shall be given facilities for inspection of all works in progress whether in workshop or on site. The Contractor is to allow for testing or prototypes of special construction units and the Architect shall be at liberty to select any samples he may require for the purpose of testing i.e. for moisture

content, or identification, species, strength, etc., such tests will be carried out by the Forestry Department.

A. CLEARING UP

The Contractor is to clear out and destroy or remove all cut ends, shaving and other wood waste from all parts of the building and the site generally, as the work progresses and at the conclusion of the work.

This is to prevent accidental borer infestation and to discourage termites and decay.

B. WORKMANSHIP

All carpenter's work shall be accurately set out strictly in accordance with the drawings and shall be framed together and securely fixed in the best responsible manner with properly made joint; all brands nails and screws, etc., shall be provided as necessary, directed and approved, and the contractor's prices shall allow for all the foregoing. All workmanship shall be of the best quality.

C. DIMENSIONS

Dimensions of timber for carpentry left with sawn faces shall comply with the previous clause specifying tolerance in the thickness. Dimensions for wrought members shall be as described in joinery.

D. JOINTING

All timber shall be as long as possible and practicable to eliminate joints. Where joints are unavoidable, surfaces shall be in contact over the whole area of the joint before fastenings are applied.

No nails, screws or bolts are to be fixed in any split end. If splitting is likely, or is encountered in the course of the work, the holes for nails are to be prebolted at diameter not exceeding 4/5th of the diameter of the nails. Clenched nails must be bent at right angles to the grain.

Lead holes are to be bored for all screws. When the use of bolts is specified the holes are to be bored from both sides of the timber and are to be of the diameter D-16, where D is the diameter of the bolt. Nuts must be brought up tight but care is to be taken to avoid crushing of the timber under the washers.

JOINERY

E. ALL TIMBER

All timber shall be FIRST (OR PRIME) grade. Species of timber tolerance shall be as defined under "Carpentry".

F. GENERALLY

All joiner's work shall be accurately set out on board to full size for the information and guidance of the artisans before commencing the respective works, with all joints, iron work and other works connected therewith fully delineated. Such setting out must be submitted to the Architect and approved before such respective works are commenced.

All joiner's work shall be cut out and framed together as soon after the commencement of the building as is practicable, but not wedged up or glued until the building is ready for fixing same. Any portions after completion of the works shall be removed and new fixed in their place together with all other work which may be affected thereby, all at the contractor's own expense.

All work shall be properly mortise, tenoned, housed, shouldered, dovetailed, notched, pinned, branded, etc., as directed and to the satisfaction of the Architect and all properly glued up with the best quality glue.

Joints in joinery must be as specified or detailed, and so designed and secured as to resist or compensate for any stresses to which they may be subjected. All nails, springe, etc., are to be punched and puttied. Loose joints are to be made where provision must be made for shrinkage, glued joints where shrinkage

need not be considered and where sealed joints are required. Glued for load bearing joints or where conditions may be guaranteed casein or organic glues may be used.

All exposed surfaces of joinery work shall be wrought and all arises "cased off" by planning and sandpapering to an approved finish suitable to the specified treatment.

JOINERY (CONT'D)

A. INSECT DAMAGE

All timber shall be free of insect damage as defined under "Carpentry".

B. SEASONING OF TIMBER

All timber shall be seasoned to a moisture content of not more than 15%.

C. DIMENSIONS

3mm reduction of specified sizes will be allowed to each wrought face except where described as finished size in which joinery shall hold up to the full dimensions.

The Contractor is to note that all joinery timber size are nominal unless otherwise stated as finished sizes. These nominal sizes have been calculated in accordance with Standard Method of Measurement of Building works for East Africa, 1st Edition Metric and no regard has been taken of metric sizes of timber at present being sold.

D. FIXING JOINERY

All beads, fillets and small members shall be fixed with round or oval brads or nails well punched in and stopped. All larger members shall be fixed with screws. Brass screw shall be used for fixing of all hardwoods, the head let in and pelleted over with wood pellets to match the grain.

E. BEDDING, FRAMES, ETC.

The Contractor's rates must include for bedding frames, sills, etc. in mortar or dressing surfaces of walls, etc., in lieu.

A. PLUGGING CONCRETE AND WALLS

Round wood plugs shall not be used, all work described as plugged shall be fixed with screws to plugs formed by drilling concrete walls, etc., with a proper tool of suitable size at 750mm spacings and filling the holes completely with "Philiplug" rawl plastic or rawlplugs in accordance with the Manufacturer's instructions.

Alternatively and where so agreed by the Architect hardwood dovetailed fixing flips, dipped in "Wolmanol" or "celcure" solution and cut and pinned or bedded in cement mortar (1:3) may be used.

B. FIBREBOARD

Shall be 12mm "Celotex" or equal and approved.

C. PLYWOOD

Shall comply with B.S.1455 (First Quality "Interior type unless otherwise specified).

D. BLOCKBOARD

Shall be laminated board faced with sides with 4mm plywood. Exposed edges and shall be lipped with 19mm hardwood and rates shall include for lipping.

E. PLASTIC SHEETING

Shall be "Formica" sheeting 1.5mm thick and securely fixed with approved type waterproof adhesive, and in the colours approved by the Architect.

F. FLUSH DOORS

All flush doors shall be manufactured to the thicknesses specified and consists of 100mm wide fraying all around with horizontal core battens at not more than 75mm centres pressure impregnated as described and bored with 12mm diameter ventilation holes at 300mm centres. Doors shall have two lock blocks and be faced with both sides with 6mm plywood and have 25mm mahogany twice rebated lipping all round and otherwise be equal to an approved ample. External flush doors shall be as described above but faced both sides with marine quality plywood and same should be for kitchen and bathroom.

G. PRICES TO INCLUDE

Prices of items hereafter shall include for the foregoing labours, etc., and in addition all prices for linear items are to include all internal and external angles, either metered or tongued, all fair, fitted, stopped, notched or returned ends, all similar incidental labours and all short lengths.

H. BOTTOM EDGES

Bottom edges of doors shall be painted with one coat of approved primer before fixing.

J. IRONMONGERY

All locks and ironmongery shall be fixed with screws etc., to match. Before the woodwork is painted, handles shall be removed, carefully stored and refixed after completion of painting and decorating, and left in perfect working order. All keys shall be labelled with the door reference marked on labels before handing to the Architect on completion.

IRONMONGERY

A. GENERALLY

Prices for fixing ironmongery shall before only fixing before woodwork is decorated and for removing lock handles, finger plates and the like and re-fixing after decoration is completed, and it shall not include the price of ironmongery. Ironmongery shall be supplied by a nominated supplier.

B. IRONMONGERY

I) Ironmongery shall be fixed with suitable screw to match and prices shall include for this.

ii) The keys of all locks shall have labels attached with door references marked on before handing to the Architect.

C. MOVEABLE PARTS

All locks, springs and other items of ironmongery with moveable parts shall be properly tested, cleaned and adjusted where necessary to ensure proper working order at the completion of the works and left in perfect working order by the Contractor.

D. SAMPLES

i) Samples of all ironmongery specified shall be submitted to the Architect for approval, and the approved samples shall thereafter be regarded as the standard for the work. Ironmongery which in the opinion of the Architect does not conform to this standard shall be removed from the site.

ii) Alternatively, ironmongery of an equal standard will be acceptable providing samples are submitted to and approved by the Architect before orders for such ironmongery are placed.

METAL WORK

E. ALL MATERIALS

Shall be of the best quality, free from defects. The materials in all stages of transportation, handling and piling shall be kept clean and injury from breaking, bending and distortion prevented.

F. NAILS, SCREWS AND BOLTS

Shall be of the best quality mild steel of lengths and weights approved by the Architect. Nails shall be to B.S.1202 and bolt to B.S.916.

G. WORKMANSHIP

All work shall be carried out in the most workmanlike manner and strictly as directed by the Architect.

Welding shall be neatly cleaned off and units shall be prefabricated in the workshop wherever possible, the minimum of site welding being employed.

All screw work shall have full internal and external threads and holes shall have been cleaned off. Counter-sinkings must be concentric.

A. "NACO" LOUVRES

Shall be of steel, aluminium-lacquered, single control type, unless otherwise described, carefully screwed into timber sub-frames or plugged and screwed to walling. Louvres of equal quality of other manufacture may be substituted on approval.

Prices shall include for oiling and adjusting and leaving clean and undamaged on completion.

B. MILD STEEL

For burglar bars and reinforcement shall comply with B.S.15. Work shall be fabricated until size dimensions have been checked and no additional claim will be accepted should final dimensions differ from those on the drawings.

All welds shall be ground smooth and the Contractor shall ensure that the metalwork is prepared for painting as described in painting and decorating.

The Contractor is to ensure that all work is erected plumb and true and be so maintained until properly secured by permanent fixings.

C. PAINTING

All steel is to be wire brushed and any loose scale, dirt or greases shall be removed before any painting is commenced. One coat of red oxide primer type A to B.S.2523 shall be applied at the shop.

Any damage to the priming paint shall be made good to the Architect's satisfaction.

D. MATERIALS GENERALLY

i) MATERIALS

Specified in this section may be applicable to any or all of the subsequent subtrades in metalwork.

ii) SUPPLIERS

Obtain all materials from suppliers approved by the Engineers.

iii) STANDARDS

Produce the manufacturer's certificate of compliance with the standards specified if so requested by the Engineer.

iv) FINISHES

Metal commodities for making components must be either pre-finished or suitable to receive the finished specified.

A. SECTIONS ETC.

i) HOT ROLLED STEEL SECTIONS

Except equal and unequal angles: to B.S. 4: part 1, made from steel to B.S.4360 part 2

ii) HOT ROLLED EQUAL AND UNEQUAL ANGLES

Part 1 (metric converted from imperial dimensions) or to B.S.4848: Part 4 (accordinated metric dimensions). Do not substitute sections of dimensions other than those specified without the prior approval of the Engineer.

iii) HOT ROLLED HOLLOW STEEL SECTIONS

Part 2, made from steel to B.S. 4360: Part 2

iv) HOT ROLLED STEEL BARS

To B.S.4449

v) COLD ROLLED STEEL SECTIONS

To B.S.2994, made from steel to B.S.1449: Part 1B (HR, CR, HS, or CS quality unless otherwise specified or shown on the drawings)

vi) STEEL TUBE AND TUBULARS

To B.S.1387 medium thickness unless otherwise specified. If steel tubes to B.S.1775 are required, they will be specified or shown on the drawings.

vii) STAINLESS STEEL TUBE

To B.S.3014, welded unless otherwise specified.

viii) COPPER AND ALUMINIUM ALLOYS

If the alloy is not specified or stated on the drawing, it is to be suitable for the application.

ix) ALUMINIUM ALLOY BARS, TUBES AND SECTIONS

To B.S.1161 and B.S.1474

x) COPPER AND COPPER ALLOY RODS AND SECTIONS

To B.S.2874

xi) COPPER AND COPPER ALLOY TUBE

To B.s.2871: Part 2

xii) TIMBER FOR CORES OF DRAWN SECTIONS

To B.S.1186: Part 1, concealed surfaces class, straight grained of mahogany or other approved hardwood.

A. MESH

STEEL MESH FABRIC

i) To B.S.4483, welded type, and of square, structural or long mesh as specified or shown on the drawing.

ii) MOSQUITO MESH

Approved fine wire mesh or gauge of non-corroding metal, for example aluminium.

B. PLATE SHEET AND STRIP

STEEL PLATE

For welding to B.S.4360, Section 2 unless otherwise specified. Steel to this standard is equally suitable for bolting and rivetting, and may be used unless steel plate to B.S. 1449 is specified.

PAVINGS AND PLASTERWORK

C. GENERALLY

i) Prices for paving shall include for preparation of concrete floor and painting with cement grout as described , and any extra thickness consequent upon the floor not being finished to the true levels and also for all temporary rules and for all formwork to stop pavings at openings or edges as required. Prices for tile and similar paving shall include for any pointing to exposed edges.

ii) Plastering to walls has been measured over concrete columns, lintols, etc., flush with the wall face, and prices for plastering shall include for hacking concrete or for raking out joints to form key, and for any necessary dubbing out.

iii) Prices of superficial items of paving and plastering are to include for narrow widths and small quantities, fair edges and arises, rounded external angles up to 10mm radius, making good to metal windows or door frames and making good around pipes, holder bats, and other metalwork and for all similar incidental labours unless specifically measured.

iv) Prices of lineal items are to include for all short lengths, angles, arises, mitres, ends and the like, and for all necessary dubbing etc.

v) Prices for floor or wall tiling shall include for all straight cutting and waste, small quantities and narrow widths.

A. CEMENT

Cement shall be as described in "Concrete work".

B. SAND

Sand shall be as described in "Masonry and Blockwork"

C. LIME

Lime and treatment before use shall be as described in "Masonry and Blockwork" except that it shall comply with B.S.890, Class `A'.

D. WATERPROOFING COMPOUNDS

All waterproofing compounds are to be to the Architect's approval and used strictly in accordance with the Manufacturer's printed directions.

E. MIXING

All materials for paving and plastering must be measured in proper gauge boxes in the proportions specified and mixed on clean wood or iron platforms and turned over at least three times dry until the mix is of a uniform colour. Water shall then be added by means of a rose nozzle and the materials again turned over until the mass is thoroughly mixed with water. Alternatively, mechanical mixing methods may be used to obtain the same result if approved by the Architect.

F. PREPARATION FOR PAVINGS AND SCREEDS

As soon as the paving has set sufficiently it is to be covered with a well wetted layer of sawdust, hessian or other approved materials and this layer is to be kept damp for at least seven days during which period no traffic is to be allowed over the paving. When no longer required as a protection to the surface, the material is to be removed and the paving left clean and perfect.

All pavings shall be laid with joints coinciding with the construction joints in the concrete beds upon which they are laid and the pattern set out accordingly.

G. VERMICULITE ROOF SCREEDS

Vericulite screeds are to be mixed in the proportions of 250kgs. Portland cement to 1 cubic metre vermiculite Grade 5, all in strict accordance with the Manufacturer's printed instructions. The screed is to be finished with 10mm cement and sand 1:3, trowelled smooth to receive roof finish as previously specified. No vermiculite is to be laid on rainy weather and screeds are not to be walked on for three days after
laying.

H. SCREEDS TO RECEIVE FLOOR AND WALL FINISHINGS

These are to be laid true and level, particular care being taken to obtain a perfectly smooth surface to receive P.V.C. and similar floor finishings.

A. CEMENT AND SAND PAVINGS

To be in cement and sand (1:4) and finished perfectly smooth and level with a steel trowel.

B. SKIRTINGS

Skirtings to cement paved floors shall be in cement and sand (1:4) to match the paving, with rounded arris and 38mm radius cove at junction with paving.

C. JUNCTION STRIPS

At the junction of differing floor finishes fix in position 3mm x 25mm plastic jointing strips cut to lengths, bedded in and finished flush with pavings. All plastic jointing strips shall be black in colour.

D. FLOOR HARDENER

Treat the surface where specified with three coats of sodium silicate or other equal and approved hardener in accordance with the manufacturer's instructions.

E. P.V.C. FLOORING

Dunlop Vinylex asbestos floor tiles to B.S.3261 of thickness specified and colours selected by the Architect and executed by approved sub-contractor. Upon completion the flooring is to receive two coats of approved polish.

F. GRANOLITHIC AND TERRAZZO PAVING AND WALL FINISHES

a) GENERALLY

i) Construction joints between bays of paving are to be straight and vertical and are to coincide as far as possible, with those in the concrete under.

ii) After spreading and before finally striking to screed levels the pavings etc., are to be lightly tamped each stage of the laying operation is to be properly carried out at the optimum degree of stiffness of the mix so that the aggregate remains correctly distributed throughout the pavings etc., and so finished that the surface is true to level dense, smooth and free of laitance and other defects and blemishes. The use of dry cement or sand to absorb surplus moisture will not be allowed.

iii) The thickness of the pavings etc., in these Bills of Quantities include for the combined screed or backing and the granolithic or terrazzo finish.

iv) All granolithic and terrazzo finishings shall be divided into areas not exceeding 3 square metres with dividing strips as specified.

b) SCREED AND BACKING

To be in cement and sand (1:4)

c) GRANOLITHIC

i) To be composed by volume of one part of cement, one part of sand and two parts 6mm black trap chippings free of dust, laid or applied to screeds or backings whilst they are still green.

ii) Paving shall be 25mm minimum combined thickness comprising 15mm thick cement and sand (1:4) backing and 10mm thick granolithic.

iii) Dadoes shall be 20mm minimum combined thickness comprising 12mm thick cement (1:4) backing and 8mm thick granolithic.

iv) Polished granolithic to be finished with a metal roller and all surplus cement lightly brushed off when surface is sufficiently hard to resist dislodgement of aggregate, when the surface is hard enough it shall be wet ground, using a machine, until the aggregate is uniformly revealed and then well washed with clean water. Any small voids or holes left in the surface are to be filled with cement grout rubbed down-by hand. Mouldings etc., not accessible to machines are to be hand rubbed and polished with carborundum. After an interval of 1 to 3 days the surface is to be finally machine ground using a fine abrasive.

d) TERRAZZO

i) To be composed of one part of "Snowcret" "Colorcrete" or other equal and approved white or coloured cement to two parts of clean imported marble chippings, well washed and free from dust. The marble chipping may vary in colour and from 3mm to 9mm dependent on the effect required and sample areas must be prepared for the Architect's approval.

ii) Pavings to be 25mm minimum thickness overall as for granolithic (ii) preceding.

iii) Polished terrazzo to be finished as granolithic (iv) preceding.

A. PLASTIC DIVIDING STRIPS

To be 3mm x 25mm strip set in position before paving is commenced, and embedded straight and true.

B. PLASTERING GENERALLY

i) All surfaces to be plastered or rendered shall be brushed clean and be well wetted before plaster is applied. All plaster and rendering shall be kept continuously damp for seven days after application.

All arises shall be finished true and slightly rounded except where otherwise stated, and shall be run at the same time as the adjoining plaster.

No partially or wholly set plaster or rendering will be allowed to be used or re-mixed.

ii) The Contractor shall prepare samples of the Plastering and rendering as directed until the quality texture and finish required is obtained and approved by the Architect, after which all plastering executed in the work shall conform to the respective approved samples.

iii) The Contractor shall cut out and make good all cracks, blisters and other defects and leave the whole of the work perfect on completion. When making good defects, the plaster or rendering shall be cut out to a rectangular shape with edges undercut to form dove-tailed key, and all finished flush with fact of surrounding plaster or rendering.

A. INTERNAL OR EXTERNAL CEMENT AND SAND RENDER

Plaster described as internal cement and sand (1:5) render or external cement and sand (1:5) render shall be executed in two coats and be composed of one part cement to five parts sand. The first coat shall be laid to a uniform surface finished with a wood float well scored and allowed to dry out for at least 7 days before applying the finishing coat. The second or finishing coat shall be thoroughly worked and finished hard and true with a steel trowel or wood float as specified hereinafter.

The total finished thickness of plaster shall be not less than 12mm thick.

B. INTERNAL GAUGED PLASTER

Plaster described as "Internal gauged plaster in two coats" shall consist of a first or rendering coat composed of one part cement, two parts lime and nine parts sand and finishing coat composed of one part cement, three parts lime and six parts sand. Application and thickness will be as for the last item.

C. GLAZED WALL TILING

i) Glazed wall tiles shall be 150x150x6mm thick cushion edge tiles with matching fittings all conforming to B.S.1281 in colours specified by the Architect.

ii) Tiles are to be bedded in "Richafix" or other equal and approved tiles fixing compound applied strictly in accordance with the manufacturer's printed instructions.

iii) Walls are to be dry before tiles are fixed and tiles are not to be soaked in water before use. Tiling is to be set and closely straight jointed with 1.5mm joints. If non-lu tiles are used cardboard or plastic spacer pieces are to be used to obtain constant joint width. On completion tiling is to be painted in white or coloured cement and cleaned down.

D. GLAZING

i) Glass panes shall be cut to sizes to fit the openings with not more than 1.5mm play all round.

ii) The rebates of all windows shall be painted one coat before puttying.

iii) All glass, where fixed with putty, is to be back and front puttied and care must be taken to ensure that putty does not project beyond the sight lines of panes and it to be neatly mitred at angles.

iv) Putty which has not set hard within seven days must be removed and the glass re-puttied at the Contractor's expense.

v) Allow for removing all cracked or broken panes of glass, cleaning rebates and re-glazing with new glass throughout sides and leaving perfect upon completion.

A. BEDDING STRIPS

Wash-leather, velvet, etc., bedding strip to edges of glass is to be of sufficient width to be turned over 6mm to each side of pane and shall be trimmed to the sight lines of the pane.

PAINTING

B. GENERALLY

i) Prices must include for rubbing down with glass paper between successive coats and all cutting in at edges.

ii) Prices shall include for all work in parti-colours all cuttings to line.

C. MATERIALS

i) Paints shall be obtained from manufacturers approved by the Employer.

ii) The materials for all other finishes shall be of the best quality available of approved manufacture.

iii) Before commencing painting, the Contractor shall submit to the Architect for approval a list of all the brands of paints and finishings including the necessary primers and undercoats he intends to use and immediately upon being so approved, orders shall be placed and total requirements obtained for the works.

iv) Once approved, no other brand of material shall be used without the express permission of the Architect, in writing.

D. MORDANT SOLUTION

All galvanized metal work to be painted shall first receive a coat of a proprietary mordant solution, approved by the Architect as suitable for this purpose.

E. KNOTTING

To be "Shellack" knotting to B.S.1336.

F. STOPPING

To be composed of linseed oil putty, white lead, red lead and gold size suitable proportioned and mixed.

G. POLYURETHENE

To be "Ronseal" polyurethene or other equal approved by the Architect.

H. WAX POLISH

Wash polish is to be furniture polish of an approved proprietary brand.

A. SUPPLY AND PREPARATION

i) All paints etc., shall be delivered on site in the original drums or tins, and shall be mixed and applied strictly in accordance with the Manufacturer's printed directions. The only addition which will be allowed to be made will be liquid thinners, driers etc., supplied by the makers for the purpose. No paint, distemper, etc., shall be thinned more than approved by the Architect.

ii) Paint for external work shall be of the special quality recommended by the manufacturers for external use.

B. GENERAL WORKMANSHIP

i) The priming, undercoats and finishing coats shall each one be of different tints and the priming and undercoats shall be the correct brands and tints to suit the respective finishing coats, all in accordance with the Manufacturers directions.

ii) All surfaces must be thoroughly cleaned down previous to painting and decorating work, and no external painting may be done in rainy weather. All paint must be thoroughly well worked on and excess of paint in any coat must be avoided.

iii) All brushes, tools and receptacles are to be kept clean and free from dirt or old paint and are to be thoroughly cleaned each time after use.

iv) Each coat is to be well brushed into the surface so that every part, including joints, angles etc., is adequately covered, but care is to be taken to avoid excessive or uneven thickness of paint film, particularly at edges and in angles, etc.

v) Each coat of paint, etc., shall be properly dry and shall be well rubbed down with fine sandpaper and be brushed clean before the next coat is applied. The paintwork shall be finished smooth and free from brush marks.

vi) Where so required or directed, painting shall be in part-colours and picked out and cut in and the prices shall include this.

vii) All ironmongery, metal or plastic plates and electrical outlet plates and fittings and the like shall be removed before painting is commenced, and re-fixed on the completion of the work.

viii) No spray or roller painting will be allowed unless permission is given by the Architect.

ix) The Contractor shall so arrange his programme of work that all other trades are completed and away from the area to be painted when painting begins.

C. SAMPLES AND COLOURS

All colours will be selected by the Architect from the B.S. range of colours. Samples and colour cards of all paints, distemper, and materials shall be submitted for approval of the Architect before the same are applied and sample panels shall be executed for the Architect's approval where and when directed. Such samples when approved shall become the standard for the work.

A. PREPARATION AND PRIMING OF PAINTED SURFACES

a) Plastered and rendered surfaces:

i) Plastered surfaces are to be perfectly smooth, free from defects and ready for decorations. All such surfaces shall be allowed to dry for a minimum period of four weeks and rubbed down with No.2 grade sandpaper to remove trowel marks, stains etc. After the priming coat, all cracks and imperfections are to be made good with `Polyfilla' (or similar approved hard filler), well rubbed down and then touched up with the priming coat.

ii) Priming for plastic emulsion paint shall be the paint thinned with 25 per cent water.

iii) Priming for oil paint shall be with an alkali-resistant primer.

b) Hardboard surfaces:

i) Priming for plastic emulsion paint shall be the paint thinned with 25 per cent water.

ii) Priming for oil paint shall be with a thin oil primer.

c) Ferrous metalwork:

All surfaces shall be thoroughly brushed down with wire brushes to remove all scale, rust, etc and rubbed down with No.2 grade sandpaper and brushed and left perfectly clean immediately prior to decoration.

i) Shop-primed: Surfaces to receive oil paint shall have all bare places touched up with approved metal zinc chromate primer.

ii) Unprimed: Surfaces shall be given one coat of primer as last.

iii) Galvanised: Surfaces shall be treated before painting with mordant solution. The surfaces shall then be thoroughly washed down with clean water, allowed to dry and primed as last.

iv) Coated: Surfaces already treated with bituminous solution shall receive an insulating coat of anti-bitumen primer or ~Shellac' knotting

d) Wood surfaces to receive paint:

i) The woodwork shall have all knots or resinous parts carefully treated with well-knotting aluminium primer. All cracks, nails, or other holes shall be thoroughly cleaned out and after priming all such cracks etc., are to be filled with matching hard stopping which is to be rubbed down flush with the adjoining surfaces.

ii) Priming for oil paint shall be with self-knotting aluminium primer.

iii) The back of all joinery work is to be primed before fixing.

A. PREPARATION, PRIMING ETC. OF CLEAR TREATED WOOD SURFACES

All wood surfaces to receive clear treatment shall be rubbed down to a satin finish with fine sandpaper immediately prior to application.

B. COVERING UP

All floors etc., shall be covered up with dust sheets when executing all painting and decorating work.

C. DELIVER UP CLEAN

Paint splashes, spots and stains, shall be removed from floors, woodwork, etc. Any damaged surfaces shall be toughed up and the whole of the work left clean and perfect upon completion.

ROAD WORKS

D. GENERALLY

The specification of work and materials in this section, which repeat similar work in processing sections, shall be deemed to be the full specification of work and materials contained in the preceding Bills.

ACCESS ROADS AND CAR PARKS

E. EXCAVATION

Excavation shall be to levels approved by the Engineer. All soft spots are to be excavated and filled with hard filling thoroughly compacted.

F. FALLS

Roads and car parks shall have a minimum fall of 1 in 36. The actual falls will be decided by the Engineer on site.

G. COMPACTION OF FORMATION

The maximum dry density of the soils to be compacted shall be determined by Test 9 as described in B.S.1377/49.

The dry density of the soil in the field shall be determined by Test 10 as described in B.S.1377/49.

The relative compaction of the formation shall be determined by the percentage rates of the dry density in the field (Test 10) to the maximum dry density (Test 9).

The relative compaction of the formation is to be not less than 100% when compacted at optimum moisture content plus a minus 2%. Water shall be used as necessary to achieve the desired moisture content.

A. COMPACTION SUB-BASE

The murram sub-base shall be built up in layers as described hereafter, each layer shall be compacted at B.S. optimum moisture content plus or minus 2% until a relative compaction is obtained of 95% for the lower layer and 102% for the top layer. Water shall be used as necessary to achieve the desired moisture content.

B. MURRAM SUB-BASE

The murram shall be approved clean, hard, dark coloured, imported murram free from all vegetable matter, clay or other deleterious substances and obtained from an approved source. The murram sub-base shall be 150mm thick (finished) laid in two layers to the required compaction as described herein to form on completion a firm dense surface.

The surface thus formed shall be blinded with stone dust or other approved material, watered if necessary and as directed by the
Engineer and rolled to levels, falls and cambers to form on completion a firm dense surface to receive stone pitching.

C. STONE PITCHED BASE

The stone pitched base shall be laid in one layer 150mm thick (finished) and shall consist of approved selected stones, each stone being roughly prismoidal in shape with a base area of not less than 200 square centimetres, and with a height of not less than 150mm. The stone shall be hand-packed in regular courses across the prepared murram sub-base, well wedged and bonded together, the stone in adjacent courses breaking joint as far as possible. The stones when set as described above shall have all projections broken off to form an even contour and the interstices thoroughly filled in and bound with smaller angular stones, crushed stone aggregate and stone dust. On completion the base shall be rolled and thoroughly consolidated with a 10-12 ton roller and any depressions or surface irregularities shall be made good with crushed stone. The surface thus formed shall be blinded with stone dust or other approved material, watered if necessary, and as directed by the Architect and rolled to form on completion a firm dense surface to receive the topping.

D. PRIMING COAT

The priming coat shall consist of Grade M.C.O. Medium Curing cutback bitumen, or bitumen emulsion as directed by the Engineer.

Priming shall not commence until all loose fines, superficial films and foreign material have been removed from the surface of the base by sweeping with mechanical or hard hand broom. The prepared base shall be watered, if necessary, in order to ensure that the surface is damp when the prime coat is being applied. Care shall be taken not to cause free water to lie on the surface.

On the properly cleaned and prepared base, the M.C.O. cut-back bitumen shall be applied at a temperature of 43°C, and at a rate of 1 litre per square metre by means of a pressure distributor. The prime coat shall be applied over the full width of the base and shall be left undisturbed for a period of not less than two (2) days and preferably until complete absorption has taken place and the applied prime coat has dried off thoroughly. Any excessive prime remaining on the surface shall be blotted with crusher fines or sand.

After the prime has been applied the surface of the base shall be checked for smoothness and accuracy of elevation, grade and cross-section and any irregularities or inaccuracies shall be corrected by filling in

or surfacing with premixed bituminous material and compacting until specified requirements are obtained to the satisfaction of the Engineer, at the Contractor's expense.

PREMIX SURFACING

A. GENERAL

Premix surface dressing shall consist of two layers of aggregate and bitumen applied over the whole of the clean primed surfaces of the roads and car parks to be surfaced.

B. PREMIX

The premix, its materials, its grading, method of manufacture, method of laying and tolerances of laying shall comply with B.S.1621 except where modified hereunder.

C. MANUFACTURE AND LAYING

The premix shall be manufactured in an approved mixing plant and shall, where required by the Architect be laid by means of an approved paving machine such as a Blaw-Knox or Barber Green type paver, or otherwise shall be laid in an approved manner.

D. BITUMEN

The bitumen used in the premix shall be straight-run bitumen as follows:-

Base Course - 80-100 penetration

Wearing Course - 60-70 penetration

"Wet fix" or other approved additive may be used if the Architect so instructs.

The bitumen shall be from an approved source delivered in sealed drums and opened with care to ensure cleanliness.

E. AGGREGATE

The aggregate shall be blacktrap, hard, dense stone free from dust, impurities or admixture of softer stone. Before commencing manufacture the Contractor must submit to the Engineer samples of all sizes of stone he proposes to use and these, when approved, shall form the standard for the work. If the samples are rejected, the Contractor shall be responsible for providing samples from alternative source.

F. BASE COURSE

The base course premix shall be of specified thickness after consolidation of crushed blacktrap aggregate with 80-100 penetration straight run bitumen and approved filler.

The grading shall comply with Table 2 of B.S.1621. The soluble bitumen binder minimum shall be raised from 3.0% to 3.5%.

G WEARING COURSE

The wearing course premix shall be of the specified thickness after consolidation of crushed blacktrap aggregate with 60-70 penetration straight run bitumen and approved filler.

The grading shall comply with Table 5 of B.S. 1621.

The finish surface shall be to the required gradients and cambers and shall be well rolled and neatly finished off at all curbs, walls, drainage gulleys etc., to the approval of the Engineer.

A. CONCRETE KERBS

Concrete kerbs shall comply with B.S.340 (Figure 7) for 250x125mm splayed, plain or circled kerbs.

Kerbs will be set on concrete (1:3:6) foundations sizes 225 wide x 100mm thick and have a 100mm high haunching behind.

Kerbs to be bedded, jointed and pointed in cement mortar (1:3) and to be laid true to line, perfectly level or to even gradients and to be free from all chips, cracks, blemishes and cement stains at joints.

FOUL DRAINAGE

MATERIALS AND TESTING OF MATERIALS

B. GRANULAR MATERIAL FOR UPVC PIPE BEDDING

Granular material for pipe bedding shall consist of free-draining course or fine gravel at good self compacting nature free of sharp stones, rock fragments or other debris. The maximum particle size shall not exceed 20mm generally and not more than 5% by mass shall be retained on a 20mm sieve. Material giving a compaction fraction over 0.3 when tested in accordance with B.S. CP12 shall be deemed unsuitable and material giving a CF between 0.1 and 0.3 shall be given extra care in compaction and shall not be used where pipes are subjected to water logged conditions after laying.

C. UPVC PIPES AND FITTINGS

UPVC pressure pipes, couplers fittings shall comply with B.S.3505 and shall be clearly marked to show diameter, class, thickness and effective length. All flanges shall conform to B.S. 4504 NP16 unless otherwise specifically stated.

UPVC pipes couplers and fittings for drains and gravity sewers shall comply with B.S.2494, 4660, 5481 as applicable.

D. DELIVERY STORAGE AND HANDLING

All pipes and fittings shall be unloaded and handled using approved lifting tackle and slings.

Steel wire ropes or chains shall not be used as slings. The Contractor shall inspect all pipes and fittings before accepting and any items found to be damaged, distorted or in any other way not in accordance with the specification shall be rejected.

Where pipes are stored at any point prior to stringing out they shall be placed neatly in stacks not more than 1.5m high.

UPVC pipes shall be stored on a flat surface previously cleared of any debris. Side supports shall be provided having a minimum bearing width of 75mm at intervals not grater than 1m. They shall be supported continuously along their entire length or on transverse bearers of 75mm width at a maximum of 1m centres.

Pipes of different sizes and thickness shall be segregated to separate stacks. When spigot and socket pipes are being stacked the bottom layer of sockets shall be prevented from direct contact with the ground wither by a shallow excavation under socket area or by the use of transverse supports. Successive pipe layers shall have sockets protruding at opposite ends of the stack so that pipe barrels are then evenly supported by one another along the entire length.

UPVC pipes shall be sheltered from the sun at all times. Pipes affected by sunlight or found to be defective in any way shall be removed from the site as required by the Engineer

While in transit, pipes shall be well secured and supported over their entire length and shall not be allowed to come in contact with any sharp corners or objects, they shall not be allowed to project unsupported over the tail-board of a lorry.

A. VALVES AND FITTINGS

For diameters greater than 50mm valves shall conform to B.S.5163. They shall not be flanged, the flanges being drilled to B.S.4504 NP16 and shall meet the requirements of the closed end test. The direction of closing shall be clockwise and shall be clearly cast on the valve cap or handwheel.

For diameter of 50mm and less gate valves shall conform to B.S.1952 wedge type, class as mentioned in the Bills of Quantities with femal screwed ends, non-rising stem and handwheel.

Small oriface single air valve shall be Glenfield and Kennedy Apex Pattern Cat. No.1251 or similar approved type. They shall be 25mm male screwed and fitted with an isolating cock, or be flanged 80mm to B.S.4504 NP 16 according to positions. The oriface shall be 1.75mm unless other wise specified.

Double air valves shall be Glenfield and Kennedy Apex pattern Cat. No.1772 valve size 400 or similar approved type. They shall be flanged 80mm unless otherwise specified to B.S.4504 NP16 and fitted with an isolating butterfly valve.

Non-return valves shall be from bronze upto 40mm and from Mechanite iron above 40mm. They shall be swing pattern and rated for at least 40 bars or as required. The ends shall be screwed to B.S.21 or flanged to B.S.4505 NP14 as required.

Surface boxes shall be of cast iron Glenfield and Kennedy type 1702, hinged and locked or similar approved where pipeline is greater than 50mm and type 1807 where the pipeline is 50mm.

Valve keys shall be of mild steel with ends to suit either valves to B.S.1952 with handwheels or to B.S.5163 with valve caps.

Hydrants shall be lugged outlet Glenfield and Kennedy Cat. No.1101 or similar to B.S.750 or the relevant Kenya Standards. Saddles for use with PVC pipes shall be nylon covered aluminium or similar approved.

A. JOINTS

All flanges shall conform to B.S.4505 NP16 unless otherwise specified.

Rubber rings between flanges shall conform to B.S.2494 and all flanged joints shall be complete with bolts, nuts and washers, B.S.W. Hezagon headed mild steel and dimensions of bolts and nuts shall conform to B.S.916.

Screwed joint shall be to B.S.21.

Joints in UPVC pipes shall be as follows:

a) UP to and including 50mm: Solvent cement to ISO 2044

b) Above 50: Mechanical type ISO 2045

For solvent cement joints, only approved cleaners and adhesives shall be used and they shall be applied in accordance with the manufacturer's instructions.

Flange adaptors or couplings shall be of Viking Johnson type or similar approved, cast iron fittings and adaptors used with UPVC pipes shall conform to B.S. 4346 Parts 4 and 5, or as recommended by the pipe supplier and approved by the Engineer.

B. PENSTOCKS AND HANDSTOPS

Penstocks and handstops shall be obtained from an approved manufacturer and shall be provided with all extension spindles, guides, headstocks and handwheels as required. Where necessary gearing shall be supplied so that the pen-stock can be operated by one man without undue effort.

C. EXCAVATION AND BACKFILLING

Trenches shall be excavated to such depth and widths as shall allow easy and proper laying and jointing of pipework and placing of pipe protection to the specified dimension and to allow a minimum 900mm cover to the pipeline generally and 1200mm under roads and drains.

D. The length of trench to be excavated without pipe laying and backfilling shall be approved by the Engineer and trenches in roads shall be subject to approval by the relevant authority.

E. The maximum width of trench excavation shall be 700mm or overall diameter of the pipe plus 400mm whichever is the greater. Any excess trench width due to slip or other cause shall be filled with class 10/40 concrete to at least the height of the pipe crown or additional pipe protection at no extra cost to the Client.

F. Where existing structures interfere with the proposed line of the pipe, the Engineer may instruct the Contractor to deviate from the straight line provide any necessary short lengths of pipe slow bends, additional joints etc. Any additional work so required will be paid for at the rates in the Bills of Quantities.

G. All materials used for backfilling shall be selected readily compatible material free from large stones, tree roots, vegetable matter, refuse, silt black cotton soil, organic clay or material with an unacceptable moisture content.

A. LAYING UPVC PIPES, VALVES, FITTINGS

All handling shall be carried out using ropes or web sling. Lighting hooks shall not be placed in the spigot or socket end pipes.

Pipes shall be laid as soon as possible after trench excavations have been approved by the Engineer. The bottom of the trench shall be cleared of any foreign matter and the underside of the pipe shall be supported throughout its entire length. Additional depressions in the excavation and bedding for joints shall be reduced to a minimum to ensure that the socket, collar or couplings is fully supported. All pipe laying shall comply fully with the manufacture's recommendations and in accordance with the Engineer's instructions and good practice.

The Contractor, in the presence of the Engineer, shall examine all pipe lengths, valves and fittings and shall remove or correct any damaged material to the satisfaction of the Engineer. All pipes, valves and fittings shall be kept clean and free from foreign matter during laying and installation. Long radius curves may be negotiated by deflection of joints or pipes only in accordance with the manufacturer's recommendations. When the pipe line has been inspected by the Engineer each pipe length shall be covered to a depth not less than 600mm for two thirds of its length in accordance with this specification leaving the joints exposed until they have been satisfactorily tested.

B. JOINTING

In all cases a perfectly watertight and secure joint shall be obtained under the specified test pressure. All pipes with flexible joints shall be accurately marked on the spigot end prior to jointing to ensure the correct gap is left in the joint after laying. Pipe spigots shall not be driven home tight into the sockets.

UPVC pipes shall not be jointed before being placed in trenches. Where a deflection in the line of a pipe is to be made at a joint, or where the pipe is to be laid to a radius, the joint shall first be made in a straight position and may be deflected only after completion of the joint. Patent and special joints shall be made fully in accordance with the manufacturer's instructions unless otherwise directed by the Engineer.

Flanges shall be thoroughly cleaned before making the joint and care shall be taken to ensure that the gasket is concentric with the pipe. Bolts shall be carefully tightened, gradually and diametrically opposite bolts tightened in succession.

Pipes shall be cut as required to permit installation of junction, valves, hydrants etc., in their correct position; the Contractor shall allow for all such cutting and waste in pricing the Bills of Quantities. Approved tools shall be used for cutting and cambering pipes.

C. PIPE BEDDING AND PROTECTION

Pipes shall be laid on a firm and continuous granular bed. The granular bed shall give a consolidated uniform thickness for the width of the trench.

D. PIPE BEDDING AND PROTECTION (CONT'D)

The pipe shall be carefully laid to ensure even bearing and along the full length of the barrel. The granular surround and hunching and fill shall be carefully placed and hand compacted around the pipe and to a height of 300mm above the pipe special care being taken to ensure a firm support to the underside of the pipe.

A. TESTING GENERAL

It shall be a condition precedent to the issue of a Certificate of completion that all pipe lines shall have been successfully tested and finally cleaned out and that all valves in the pipe line have been satisfactorily operated under working pressure.

The Contractor shall submit for approval, details of his proposed methods and programme for testing, including details of test equipment and shall arrange for all tests to be witnessed by a person authorised by the Engineer.

B. TESTING WATER AND SEWAGE RISING MAINS

Sufficient refill material shall be placed and consolidated in the pipe trench to restrain movement of the pipe under test. All joints however shall remain exposed until after successful completion of the tests to enable visual examination.

Before testing, the ends of the pipes shall, where necessary, be effectively stopped with cast iron plugs or caps, properly jointed and securely pinned and strutted, and the Contractor shall ensure that all necessary anchor and thrust blocks have been constructed and attained their required strength.

The pipe line shall be tested as the works proceed in lengths between valves or in such sorter lengths as the Engineer may approve or direct on the understanding that no extra cost will be incurred to the Employer but the maximum lengths of main to be tested shall not exceed 1kg.

The Contractor shall supply all necessary materials to carry out the test in accordance with the requirements including force pumps, water, pressure gauges, including two for the use of the Engineer, interconnecting pipework, blank flanges, temporary stop ends, struts etc. Testing shall not take place against closed valves.

After the main has been cleared of debris, and all necessary stop ends and gauges fitted to the Engineer's approval the Contractor shall fill the pipe with water reasonably free from silt, sand and grit and bring up the pressure steadily to the working pressure of the main, and maintained with a force pump for 24 hours. The pressure should the be increased steadily in increments of 1.00 bar with a pause of one minute between each increment to the specified test pressure for the section of main under test and maintained by force pump, and the rate of leakage measured by the fall in the pump feed tank.

The pressure test will be generally according to Code of Practice No.310, 1965, Section Five. Leaks must be made good, and any faulty pipes replaced before approval will be given for backfilling. In the event of pipes, fittings or valves being found fractured after laying, even though they are to all appearance properly laid, the Contractor will be held responsible and will be required to replace such defective work at his own cost, including the purchase of a similar new pipe or fittings to the original specification.

The test pressure, unless otherwise directed shall be 1.5 times nominal working pressure for the class of pipe being tested, and maintained for a minimum of 5 hours.

A. TESTING GRAVITY SEWERS

Each length of sewer shall be tested with air or water as required by the Engineer or Engineer's Representative. The apparatus used for testing shall be of a size, design and make approved by the Engineer and a gauge or U-tube indicating the pressure shall be provided if required. The test shall in all cases be applied in the presence of and to the satisfaction of the Engineer's Representatives. The testing apparatus, pump, gauge and all stoppers, shall be provided by the Contractor.

For the air test, air shall be pumped into the length of the sewer under test until a pressure equivalent to head of 100mm of water is indicated on the gauge and without any further pumping the pressure shall not fall below 75mm pressure of water in a period of 5 minutes. Any length of sewer which is found to be defective shall, at the Contractor's expense, immediately be put into a sound and satisfactory condition by repairing any defective part or, if necessary by relaying the whole of the defective length and such length shall be re-tested to the Engineer's Representative satisfaction

For the water test each length of sewer shall be tested with water after jointing and before any pipe protection is placed. A minimum head of water 1.5m shall be maintained for half an hour without additional filling with water.

If the Engineer has any reason for suspecting that the pipes or joints on any portion of the sewer have been damaged during the refilling of the trench or heading or by any other cause or reason and that the portion of sewer would no longer comply with the requirement of the test, he may order the Contractor to carry out a second test and should the length of sewer prove defective, the Contractor shall repair or make good the defects or relay the length of sewer at his own expense. Extra payment will be allowed for carrying out second test should the length of sewer prove to be satisfactory.

Where there are junctions, the branches shall be closed with rubber stoppers to be provided by the Contractor unless the branch is already sealed with a "joinder" cap and the testing of such junctions shall be included in the price for testing the sewer.

An independent final test of the whole of the work shall be applied by the Engineer's Representative and the fact that any part of the work has passed any test during the progress of the work will not relieve the Contractor or any of his obligations, and any defects found in this final test or during the Period of Maintenance shall be located and made good at the Contractor's expense.

B. STERILISING WATER MAINS

At such time as the Engineer may direct all mains shall, before being handed over to the Employer, be chlorinated, after first being cleaned and flushed with water with the following preparation of chlorinating reagent per 10,000 litres of clean water:-

a) 1 litre docium hypochlorite solution containing not less than 10 per cent of chlorine.

b) 1kg. of bleaching powder

If bleaching powder is used, it shall be mixed with water to a creamy consistency before being added to the water to be injected into the mains. After thorough mixing in a suitable tank, the chlorinated water shall be injected into the mains and left therein for at least three hours, in preference over-night. All mains shall be thoroughly flushed out with treated water before any water is permitted to be used for supply to consumers.

The Contractor shall provide suitable chlorination equipment together with all necessary pumps, piping, cocks, gauges and other materials required for injecting the requisite doses of chlorinated water into the mains. The whole of the equipment and method of application shall be such as to ensure the complete sterilization of the mains, etc., to the satisfaction of the Engineer.

A. DE-CHLORINATING WATER MAINS

It may be a requirement that heavily chlorinated water shall not be discharged into streams, ditches or water-courses. In the event the Contractor will be required to de-chlorinate any such water by injecting into it, sodium thiosulphate or sulphur dioxide. Apparatus properly designed for the purpose, and to the Engineer's approval, shall be used. It is appreciated that the application of the chemical cannot easily be carried out with sufficient accuracy to react precisely with the chlorine in the water leaving no excess. For this reason a residual content of Sodium Thiosulphate, sulphur dioxide or chlorine of upto 0.5 parts per million in the water to be discharged will be accepted. The Contractor will be required to make available the necessary testing equipment to determine the residual content. Where the requirement of this clause is needed the work of de-chlorinating is covered by provisional quantities in the Bill and the Contractor shall enter prices to cover all his expenses in this connection.

MANHOLES

B. GENERAL

At each change of section, direction or of gradient, at intersections with other sewers and at such other points as are indicated upon the drawings or where required by the Engineer, the Contractor shall construct a manhole similar to one or other of the types shown upon the drawings but the dimensions and details will depend upon the site and the depth of the sewer and the exact construction will be decided in each case by the Engineer or Engineer's Representative.

Where the site of a manhole is liable to flooding or, where the Engineer shall order the shaft or chamber shall be carried above the natural ground level to such a height as the Engineer may determine.

C. COVERS

The covers and frames for the manholes shall be in accordance with B.S.497 and obtained from approved manufacturers. They shall be coated before delivery by hot dipping in an approved bituminous materials to the satisfaction of the Engineer.

All ventilated manhole covers shall be provided with dirt-boxes of approved pattern and the rates for fixing manhole covers and frames shall include for fixing and dit-boxes, if any.

The manhole covers shall be bedded and painted in cement mortar on two courses of blockwork, corbelled as necessary. Alternatively, except where the manhole is in a roadway the blockwork may be omitted on the order of the Engineer and the manhole cover bedded and pointed in cement mortar on the concrete manhole slab, and access shaft being extended as necessary. Two sets of lifting irons for the covers shall be provided. and handed over to the Engineer's Representative as soon as fixing of the covers commences.

A. STEP IRONS

Galvanised malleable iron step-irons of approved size and pattern shall be provided and built into the walls in true vertical alignment evenly spaced apart.

B. BASE AND INVERTS

The base of all manholes (other than those constructed in segmental rings) including foundations, inverts, benchings and walls shall be formed of in-situ concrete grade 20/20 as shown on the drawings and shuttered or formed internally to the dimensions shown.

The inverts shall, together with all benchings, be rendered in cement mortar in two coats. The Contractor shall make good at his own expense any damages done to soft rendering by water flowing down the sewers for dropping through the covers or from any other cause.

C. PRECAST CONCRETE MANHOLES

Excavation for precast concrete manholes shall be as described under excavations in the preambles.

The walls shall be formed of precast concrete manhole chamber rings and, where the depths exceed about 2.5m from ground level to the pipe barrels, the manhole shall include a precast concrete taper ring together with the necessary shaft rings.

The chamber, taper, shaft rings and a cover slab shall conform with B.S.556 except that after test pieces have been immersed in water for a period of 24 hours the total absorption shall not exceed 4½% of the dry weight.

In all cases, the chamber, taper and shaft rings shall be surrounded by concrete class 20/20 100mm in thickness.

The shaft and chamber rings shall be provided in special lengths or cut as necessary to permit cover slabs and tapers to be set at the required levels and for the reception of branch sewers and backdrops. The slabs shall be left between the underside of the slabs and the top of the precast rings.

All precast manhole section shall be jointed in cement mortar.

D. IN-SITU MANHOLES

Excavation for in-situ manholes shall be as described under excavations in the preambles.

The manholes shall be constructed of blockwork and reinforced concrete and shall be formed to the shapes and sizes shown on the drawings.

The whole of the exposed concrete surface in the manhole shall be finished to a smooth and even surface.

E. CONNECTING EXISTING SEWERS AND DRAINS

Where shown on the drawings existing sewers and drains shall be properly extended, connected and jointed to new sewers, culverts, drains or channels. All such connections shall be made during the construction of the main sewer, drain or other work and a record of their position kept for future use or reference. Where pipe connections are made to a sewer, culvert, stone pitched or lined channel, the pipes shall be well and tightly built into the concrete or masonry work and be so placed as to discharge in the direction of flow of the main sewer, drain or channel and with the end of the pipe carefully cut to the necessary angle. Where the connections are between pipe sewers or drains, special connecting pipes as shown on the drawings shall be supplied and be truly laid and properly jointed.

A. TEMPORARY STOPPERS

Junction pipes which are laid but not immediately connected to gullies shall be fitted with temporary stoppers or seals, and the position of all such junctions shall be clearly defined by means of stakes or training wires properly marked and labelled.

B. PROVISION FOR FUTURE CONNECTION TO MANHOLES

Inlet pipes of the required diameters shall be built into the walls of manholes and elsewhere for future use and shall be of the diameters shown on the drawings. The external ends of all such connections shall be sealed off with temporary stoppers, or otherwise sealed off as approved as specified earlier and shall be adequately supported during the placing of concrete.

C. ELECTRICAL MATERIALS AND WORKS REGULATIONS

This specification covers the requirements of lighting and power installations in Kenya.

All apparatus and materials supplied for all work carried out shall comply with the Kenya Government Electrical Specifications, GES 1 and GES 2, local statutory regulations and the Supply Authority By-Laws. Installations should also be in accordance with the requirements of the 14th Edition of the "Regulations of the Electrical Equipment of Buildings" issued by the Institute of Electrical Engineers of Great Britain, which should be used as a "Code of Practice", except where they conflict with Kenya Government Legislation regarding electrical installations and local amendments.

D. STANDARDS

Except where otherwise indicated in this specification, the Contract works and all manufactured items shall comply with the relevant specifications of the British Standards Institution. Such specifications are hereinafter referred to as B.S. In each case, the latest editions of such specifications shall apply.

Should it be desired to offer equipment covered by other National or International standards, the approval of the Engineer must be obtained in writing before completion of the tender documents.

E. RECORD DRAWINGS

The sub-contractor shall mark accurately on one set of drawings the conduit laid during the progress of the work. This information must be made available on site for inspection by the Engineer.

At the completion of the contract the Contractor shall supply the Engineer with one set of transport originals, and two complete sets of prints showing the complete installation. The drawings shall include

the location of all apparatus conduits and cable routes, and a schematic diagram of mains distribution indicating the phasing of the system.

A. CONTRACT DRAWINGS

These drawings forming part of this specification are to be read in conjunction with this specification to enable the Contractor to prepare a tender.

These drawings are not intended to be used as working drawings unless they are released for that purpose.

Circular or square boxes shall be provided at all outlet points, unless otherwise specified and lighting fittings, ceiling switches and other accessories will be screwed to the internal lugs of the boxes. Care must always be taken when considering the use of totally enclosed fittings with polyvinyl chloride circular boxes where the temperature within the box is likely to rise above 60ºC (140ºF) special steel insert slips should be used in on junction with circular boxes where this problem can arise and also in situations where heavy pendants are used.

Looping in boxes of circular polyvinyl chloride or square or oblong shape complete with polyvinyl chloride lids secured by 2BA brass or steel plated round headed screws. All adaptable boxes and lids for the same size shall be interchangeable. No adaptable box smaller than 75mm x 50mm or larger than 300mm x 300mm shall be employed. Boxes shall be of adequate depth in relation to the size of the conduit entering them.

Conduits shall be terminated at adaptable boxes, fuse boards, switches, sockets or other equipment not possessing push-in or threaded spouts, by means of appropriate size female adaptor and polyvinyl chloride hexagonal headed bare bush. All cemented joints to be made to a depth of not less than the diameter of the conduit being used.

Earth continuity shall be provided by a separate insulated conductor drawing into the plastic conduit and rated in accordance with circuit loadings and appropriate regulations, or as mentioned on the drawings.

Where required under the regulations, an earth continuity conductor shall be provided for lighting fittings in which case the control switches shall be equipped with an appropriate earth terminal.

B. ARRANGEMENT OF CONDUIT LAYOUT

The conduit system shall be carefully planned and erected to avoid all unnecessary bends or changes in direction. Conduits shall be laid in straight horizontal or vertical lines with easy sets. Where several conduits follow similar routes, they shall be neatly grouped in multiple runs. Where multiple runs change direction, the radii of the sets shall be laid out from a common centre. Where drawn-in boxes for right angled change of direction are required in multiple runs, adaptable boxes shall be used for such size as to allow all conduits to enter the box without sets.

The cables shall be coloured in accordance with Table B4 of Institute of Electrical Engineer Regulations. Cables used on extra low voltage circuits shall have distinctive colours other than these colours.

No reduction of the strands forming the conductors shall be allowed at switch or other terminals, but all strands shall be effectively secured by screws, nuts and washers or other approved means.

CEILING ROSES

A. TYPE

Ceiling roses, ivory or white, shall be of the 3-plate pattern and fitted at all pendant points. An earthing terminal shall be provided and connected to the earth continuity conductor of the final substance circuit where applicable.

Ceiling roses of the white porcelain semi-recessed pattern shall be used for surface installation, and shall be of the all-insulated type for a flush installation.

LAMP HOLDERS

B. TYPE

Lamp holders shall generally be of plastic construction with porcelain interiors, and bayonet fitting.

Lamp holders for lamps rated 200 watts and above shall be of the Edison Screw type.

Batten type lamp holders shall be of the all-insulated bayonet type.

LIGHTING FITTINGS

C. GENERAL

The Contractor shall supply and fit all lighting fittings of the type indicated on the drawings and in the schedules. All fittings shall be suitable for operation on a 240 volts. 50 cycles supply. Lighting fittings rated other than 240 volts will not be accepted. All lighting fittings shall be supplied with lamps.

D. FLUORESCENT FITTINGS

Fluorescent fittings shall generally be of the batten type, with control gear contained within the supporting channel. All fittings shall be supported from conduits boxes, and shall be suspended by two 20mm conduits to give a clearance of 25mm between the top of the fitting and the ceiling. In the ceiling the conduit boxes, to B.S.31, shall be fitted with dome covers, to which the suspension conduit shall be joined, so that the lighting fitting hangs vertically below the conduit boxes. Fittings shall comply with B.S. 3820 or class 1, indoor normal temperature.

All fluorescent fittings shall be fitted with radio interference suppression capacitors and power factor correction capacitors and shall be earthed.

E. LAMPS

All fittings shall be supplied complete with lamps of the type and rating specified. Fluorescent tubes shall be of the "White" type, except where otherwise stated. Pearly type tungsten lamps shall be fitted in open fittings.

The Contractor shall not be relieved of any of his obligations under the contract or from correcting any errors on site or elsewhere found consequently in the working drawings prepared by the Engineer.

A. LABELS

All switchgear, switchfuses, distribution boards, etc shall be clearly lebled with black and white background engraved labels to indicate the name, purpose and position of the gear. All circuits in distribution boards shall be clearly identified in respect of the number and location of the M.C.B. The chart shall be securely fixed inside the cover of the distribution boards.

B. GALVANIZING

Galvanising shall be applied by the hot process and shall consist of smooth clean zinc coating free from defects can be in uniform thickness. The thickness shall not be less than 160gms of zinc per square metre of surface and tested in accordance with the requirements of B.S.729 where applicable. Sheradizing or other alternative processes shall not be used without approval in writing of the Engineer.

The preparation of galvanizing and the galvanising itself shall not adversely affect the mechanical properties of the coated material.

Surfaces which are normally in contact with oil shall not be galvanised or cadmium plated.

All out-door structures, access ladders, platforms, equipment cubicles shall be galvanised.

NON-METALLIC CONDUIT

C. STANDARDS AND INSTALLATION

All non-metallic conduit shall be class A heavy gauge, high impact, polyvinyl chloride complying with B.S.4606 Part 2, type AH.

The minimum size to be used on the contract is 20mm external diameter. All conduit installations shall be concealed in the walls and floors or in structural slabs.

JOINTS

Conduits will be joined and terminated utilizing the appropriate rigid polyvinyl chloride compounds as detailed below, or standard conduit entry electrical equipment. Jointing will conform to one of the following techniques:-

a) Permanent Adhesives

The solvent cement supplied by the conduit manufacturers will be used to produce a rigid sealed connection.

b) Flexible Adhesive

A non-hardening adhesive supplied by the conduit manufacturers will be used to produce a flexible sealed joint where allowance is necessary for longitudal movement (e.g. expansion couplers).

FLEXIBLE CORDS

A. TYPE

These shall be of 250 volt grade polyvinyl chloride insulated and shall comply with B.S.7. Flexible cords shall not be less than 24/20 (23/0076). Flexible cords for pendant fittings shall be circular type, heat resistant and white in colour.

B. EARTHING

Earth electrodes shall be minimum of two metres long by 15mm diameter hard drawn copper rod, and shall be located not less than three metres apart at a convenient position six metres away from the building. The terminal head of each electrode shall be in a concrete inspection pit, with cover. If the resistance to earth is not satisfactory with one electrode, then additional electrodes or an earth mat shall be provided, as directed by the Engineer.

C. DISTRIBUTION SYSTEM EARTHING

All distribution boards shall be earthed in accordance with the Institute of Electrical Engineer regulations. All metal work associated with the installation shall be earthed to comply with the regulations currently in force.

D. TESTING OR EARTHING SYSTEM

The resistance of the earth continuity system, when measured between the main earthing point and any other point in the installation, including all conduit and other metal work which may provide path or earth, shall not exceed 0.5hm, if the earth continuity system is composed entirely of copper, copper alloy or aluminium.

When the installation is complete, the sub-contractor shall carry out tests for earth loop impedance, polarity, insulation resistance, in the presence of, and to the satisfaction of the Engineer and the Kenya Power & Lighting Company. The Contractor shall rectify all work not giving test results within the limits prescribed.

Four copies of all test results shall be forwarded to the Engineer and a certificate of completion will not be issued until such tests have been approved.

E. WORKING DRAWINGS

Working drawings to be prepared by the Engineer shall be detailed as below but not restricted only the these:-

a) General arrangement drawings showing plants, M.V. Switchboards, distribution boards, consumer units, fittings, switch sockets, etc.

b) Layout drawings of concealed and surface conduits, ducts, trunking etc.

c) Any other drawings that are not called for in the specifications.

Thereafter, the Engineers shall submit copies of approved working drawings for distribution to all parties concerned.

A. BENDS

Bends and sets in the conduit will be made in accordance with the manufacturer's instructions. The radius of the bend shall not be less than 2.5 times the outside diameter of the conduit, or such greater radius which will facilitate easy drawing into cables.

B. EXPANSION

Adequate allowance shall be made for longitudal expansion and contraction of the conduit under normal working temperature variations as follows:-

a) Expansion couplers should be used in straight runs exceeding 6 metres with a loose or flexible type joint, (A. above then (b) at the long spout end of the coupler.

Where conduits are concealed or laid on structural floors, they shall be secured by a fixed method to be approved by the Engineer. Where it is essential that conduits cross one another in floors, the chases shall be deepened and the conduits set to create the minimum desirable diversion.

Care shall be taken to ensure that there is no obstruction to cables within the conduits caused by the ingress of plaster, concrete, or other matter. Conduit ends must be cut square and cleaned of burrs.

C. CLEANING AND PAINTING

Having due regard to the destination and climatic conditions under which the plant is to operate, extreme care shall be exercised in the manufacture of the equipment to prevent the formation of any corrosion.

All equipments shall be cleaned of all dust, oil, grease, dirt, scale and rust by power tool operated metal brush or preferably by shot or grit blasting and then ground smooth where necessary.

Unless otherwise approved, they shall then immediately have applied to them two coats of approved primer paint. After inspection, any rough surfaces shall be filled in and smoothed over and further painting in the factory shall be as follows:-

a) All interior surfaces of cubicles, kiosks, boxes and the like, containing wiring or other apparatus and internal components of the plant which are despatched to site in an assembled condition, shall be finished painted with at least two coats of white enamel. The final coat shall be of white anti-condezation finish, where so specified.

b) The external surface of the panels shall be finished in grey stove enamel to B.S.381 C shade 631 or other shade as may be approved by the Engineer.

c) All interior surfaces of tanks and other oil filled chambers and external surfaces of piping therein shall

be painted finally with an oil resisting coating to the approval of the Engineer.

d) All wall and floor mounted junction boxes, loose starters etc., throughout the works shall be finished in grey stove enamel or painted to B.S.381 C shade 631 or other shade as may be approved by the Engineer.

After all erection has been completed at site, the Contractor shall make good all defects in painting and galvanizing which have arisen during transport, storage and erection on site and shall apply one undercoat and one finished coat of gloss paint to B.S.311 C shade 631 or other shade as may be approved by the Engineer to the external surface of all equipment.

Where all erection metalwork has been damaged it shall either be repaired by cold galvanising at site or alternatively, at the discretion of the Engineer, be returned to the manufacturer for re-galvanising by the hot process.

DISTRIBUTION BOARDS

A. TYPE AND RATING

General lighting and power distribution boards shall comply with B.S.3817, B.S.5861 and B.S.214 and shall be of the metal clad pattern, flush mounted, except where otherwise specified on the drawings.

B. CONSTRUCTION

Enclosures shall be substantially constructed from 16S.W.G. minimum thickness sheet steel having hinged front cover, and shall be vermin and insect proof. Each unit shall house miniature circuit breakers and shall be supplied complete with bus-bars, earthing terminal, neutral bar, circuit chart, and blanking plate for any spare ways. The incoming isolator switch shall be integral with the distribution board in consumer's unit only.

C. MINIATURE CIRCUIT BREAKERS

All distribution boards shall be supplied with M.C.B. manufactured to B.S.3871 and of a rating as specified on the drawings. The circuit breakers shall incorporate both terminal overload and magnetic short circuit tripping, with a trip free-mechanism.

All distribution boards shall be supplied with MCB manufactured to B.S.3871 and of a rating as specified on the drawings. The circuit breakers shall incorporate both terminal overload and magnetic short circuit tripping with a trip free mechanism.

Three phase circuits shall be controlled by integrally manufactured three pole brakers, with one common operating lever. An inter-tripping mechanism shall ensure isolation of all three poles in the event of an overload or short circuit on any one phase.

D. EARTH LEAKAGE CIRCUIT BREAKERS

If specified or indicated on the contract drawings, the use of E.L.C.B. for isolation of incoming supply in the distribution board, it shall be an approved type for flush mounting.

The general requirements of the E.L.C.B. are as follows:-

a) It shall be high sensitivity i.e. it shall operate in 30 milliseconds for a leakage current of 30 milli-ampere.

b) Its operation shall not rely on the mains supply for tripping under fault conditions. For example, in the event of a leakage from the live of each conductor occurring at the same time a break in the neutral supply wire, the breaker shall trip.

A. LABELLING

A circuit chart with each board shall show the name, location and current loading of each circuit connected. Each board shall be fitted with an engraved identification label in black and white, such as `distribution board D.1.' etc., and all three phase boards shall be labelled in white or red, `DANGER 415 VOLTS'.

B. ERECTION

Conduits for each circuit shall be completely erected before any cable is drawn in. Adequate draw-in points shall be provided.

Straight runs shall have draw-in facilities at distance not exceeding 12 metres. Runs incorporating sets or bends shall have draw-in facilities at a distance not exceeding 9 metres. These distances may need to be reduced in difficult situations or with particular cable complexes.

Not more than four easy sets, or two right angle bends or sets may be installed between draw-in points. Solid elbow or tees shall not be accepted.

FINAL SUB-CIRCUIT WIRING

C. TYPE

All power and lighting wiring cables shall be 600/1000 volt grade, single core polyvinyl chloride, insulted, with stranded copper conductors, manufactured in accordance with B.S.6004. The minimum sizes on lighting circuits shall be 1.5 sq.m sizes on power spur circuits shall be 4.0 sq.mm. and on ring main circuits 2.5 sq.mm.

D. INSTALLATION

Cables forming sub-circuits connected to different sub-distribution boards, shall not be drawn into the same conduit or draw-in box.

Saddles as supplied by the manufacturers shall include a sliding support tolerance for longitudual expansion.

Special consideration may need to be given to the fixing of accessories where this may prevent natural conduit movements. Oversize or slotted fixing holes may be necessary or introduction of expansion couplers.

A. SUPPORT

Conduit should be supported by saddles at not less than 900mm intervals. Where working temperatures tend to be high this should be reduced to 600mm.

B. CONDUITS BOXES AND FITTINGS

All conduit boxes shall be circular or square pattern or rigid polyvinyl chloride suitable for plain connections conforming to shed 61 B.S.4607 part. Boxes for supporting a fitting or accessory shall be fitted with a polyvinyl chloride lid held in position by means of two 2 BA round headed screws. Boxes shall have metallic screwed inserts.

C. P.M.E. SYSTEM

Provision shall be made for the P.M.E. system at supply intake (where applicable).

"P.M.E." means that system whereby the neutral conductor of the supply network is earthed at a prescribed number of points along its routes, together with the installation earth continuity conductor, at each consumer's installation, so providing a metallic path for the flow of earth fault currents. The

connections between the neutral conductor of the supply network and the earth continuity conductor of the installation shall be made by the Supply Authority at the point of intake only. The connection at the isolators will be made by the Contractor in the presence of the Engineer after completion of all tests.

D. COMMISSIONING

The whole installation shall be tested to the statutory requirements of the Electricity Authority, Institute of Electrical Engineer Regulations and commissioned in the presence of and to the satisfaction of the Engineer.

Four copies of test reports shall be provided within seven days of carrying out the tests, and the reports shall include full details of how each test was carried out, and a copy of all reading taken.

SOCKET OUTLETS

E. GENERAL

In all areas, general power outlets shall be of the 13amp. 3 pin fused plug type complying with B.S.1363.

They shall be flush pattern, with white or ivory cover plates unless otherwise specified on the drawings. Where the circuits are supplied from a common feed, two outlets shall form a twin unit in a common box. The earthing terminal of every socket outlet shall be connected to the earth continuity conductor of the final sub-circuit by an appropriately sized insulated copper conductor. Unless otherwise stated they shall be mounted at 300mm above the finished floor level.

FUSED CONNECTION UNITS

A. GENERAL

All fused connection units shall be 13 amps. with fuse and neon indicator lamp. Boxes shall be flush type with white or ivory cover plates and shall be switched type unless otherwise specified on the drawings.

B. FUSES

All fused connection units shall be fitted with 12 amp. fuses, unless otherwise specified.

C. LABELLING

The front plate of each fused connection shall, unless otherwise specified be engraved with the name of the appliance connected to it.

LIGHTING SWITCHES

D. TYPE

Lighting switches shall be of the all-insulated rocker-operating plate-switch type to B.S.3676 of ample rating. Switch inserts shall be white, set in white or ivory cover plates.

Switches controlling points in bathroom shall be placed outside the bathroom or consist of a ceiling switch operated by a non-conducting cord, as specified switches mounted outdoors shall be of a weathertight pattern.

Switches shall be one way, two ways or intermediate as specified and where a number of switches are mounted together, they shall be fitted in common box.

Ceiling switches shall be white or ivory semi recessed pattern, and shall only be used where specified. Pull cords shall be fitted with shock absorbing springs.

STREET LIGHTING

E. KENYA POWER AND LIGHTING SUPPLY

The electrical supply shall be derived from Kenya Power and Lighting Company Limited at 240 volts x single phase 50HZ.

The electrical Contractor shall submit commencement and completion certificate and application for electrical supply to Kenya Power and Lighting Company Limited and make all the arrangements for the supply to each control pillar.

Provisional sum is allowed in the Bill for the Kenya Power and Lighting Company Limited's service line charges.

The electrical Contractor shall allow for all the necessary attendance to Kenya Power and Lighting Company Limited's work.

A . STREET LIGHTING COLUMNS

Street lighting columns shall be steel columns conforming to B.S.1940/1952 having amounting height of 6.00 metres and shall be as shown on the drawings. The columns shall be installed at a minimum depth of 825mm in the ground on a 75mm thick concrete foundation.

After manufacture and before erection the columns shall be treated with an approved mordant solution which shall be washed off and the whole allowed to dry. Thereafter the columns shall be painted with one coat of leylac enamel and two coats of gloss paint to an approved colour.

B. LANTERNS

Lanterns shall be of the completely enclosed type with antivandal bowl designed for side entry mounting on brackets with a 37mm diameter plain tube. They shall be capable of accommodating one single 125 watt M.B.F./U lamp 3-slot lamp holder connected with heat resisting cable. The lanterns shall be of semi cut-off type with light output ratio not less than 70% and with incorporated control gear, complete with lamp. The lantern shall be as `SIEMENS' Cat No.5NA 383 or equivalent approved by the City Engineer and the Consulting Engineer. If any alternative make is to be used the details shall be given at the time of submission of tenders.

C. CABLES

Polyvinyl chloride armoured copper conductors cables shall be 250/440 volt grade confirming to B.S.3346/61.

$4mm^2$ x 2-core, 3-core P.V.C. wapvc cables shall be used for street lighting installation as indicated on the drawings.

All cables shall be terminated with brass glands of suitable size to maintain proper earth continuity throughout the system.

D. DUCTS

Ducts for road crossing shall be concrete pipes joined in an approved manner, with all internal diameter of not less than 100mm. The ducts shall be laid at least 0.5metres below the finished road level on a compacted bed of concrete mix 1:3:6 and at least 150mm concrete surround.

E. CONTROL PILLAR

The control pillar shall be metal pillar conforming to drawings.

The control pillar shall be erected on 300mm thick bed of concrete mix 1:2:4 and a minimum of 225mm above ground level in the position indicated on the drawings. The control pillar shall be complete with time switch, switch-gear, cutouts, earth leakage current operated circuit breakers and all associated wiring. The control pillar shall be adequately earthed.

A. SYSTEM OF WIRING

Cables shall be 4mm^2 x 2-core, 2-core pvc laid with a layer of soft sand underneath and over in a trench 500mm deep along the road approximately 600mm deep across the road and approximately 600mm away from the road kerbs. The loop-in and loop-out arrangement shall be through a cut-out mounted in pole windows. Galvanised armoured wires shall be properly earthed and to maintain earth continuity earth clips and connectors to be used. From the cut-out to the lantern 1.5m^2 pvc insulated and sheathed twin and earth cables shall be used protected by 5A cartridge fuse. The lantern shall be earthed separately with earthwire taken from the main point. Cables crossing the road shall be laid in ducts previously specified. The cables laid in trench shall be protected with "HATARI" cable tiles.

No underground joints will be allowed.

B. EARTHING

All poles, lanterns and other metal parts shall be properly earthed. Electrical and mechanical continuity shall be pre-served throughout the whole systems from the control pillar to the remotest pole and the earth resistance must be efficiently earthed through earth electrodes by means of substantial copper clamps secured by non-rusting bolts. The lead must be visible and adequately protected. No earthing lead shall be less than 6mm^2 twin with earth wire may be used.

C. EARTH LEAKAGE CIRCUIT BREAKER

The earth leakage circuit breaker shall be current operated as manufactured by `CRABTREE' Cat No.13030/1 with over-current and short circuit protection and shall conform to B.S.4293.68 rated at 240 volts 50HZ alternating current.

D. CONSUMER UNITS

These shall be surface mounted 6-way SPN MCB consumer unit as manufactured by `CRABTREE' Cat No.206/1 or equivalent with MCB ratings as shown on the drawing. The minimum fixing position height above floor level for the units shall be 1.8 metres.

E. TESTING

The installation when complete shall pass the following tests:-

a) Insulation resistance between lines and line/neutral.

b) Insulation resistant between line and earth and neutral and earth.

c) Earth continuity resistance including all fittings.

d) Polarity check. Contractor shall submit a completion certificate to Kenya Power and Lighting Company Limited for electricity connection.

F. RESISTANCE

Test on earth electrode when carried out with earth (null balance) at any point within the net work must not exceed 3ohms.

A. MAINTENANCE

The Contractor shall be responsible for maintenance of equipment for 12 months after substantial completion. He should allow his price for replacement of defective or burnt out lamps and other equipment.

All works to be carried out to the satisfaction of the Engineer. The Contractor shall be required to carry out all adjustments and improvements to meet the Architect's requirements at his own cost.